DOCUMENT RESUME

ED 316 197 IR 014 189

TITLE	Annual Report, 1988-89.
INSTITUTION	South Carolina State Dept. of Education, Columbia. Office of Instructional Technology.
PUB DATE	89
NOTE	68p.; For the 1987-88 Annual Report, see ED 305 060.
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	Annual Reports; *Computer Assisted Instruction; *Educational Radio; *Educational Technology; *Educational Television; Elementary Secondary Education; Program Evaluation; *Staff Development; *State Programs; State Surveys; Teleconferencing; Use Studies
IDENTIFIERS	Interactive Television; *South Carolina Department of Education

ABSTRACT

This report summarizes the activities of the South Carolina Office of Instructional Technology during the 1988-89 school year. Objectives relating to planning, fiscal management, administration, computers, evaluation, dissemination, and reporting for the office's Annual Management Plan are outlined. An advisory system designed to facilitate communication between the office and schools is described, and 13 publications available from the office are listed. Primary activities in computer-assisted instruction are discussed, including the revision of software advisory listings and conducting the sixth annual statewide computer survey. Brief descriptions of instructional television (ITV) and radio resources developed by the Resource Development Section follow. Other activities of this section are noted, e.g., program evaluation, workshops, and new staff development resources. Data are also reported for major accomplishments of the Utilization Section inservice and training utilization, utilization services provided, television network expansion, equipment purchases, computer education utilization, and the Software Evaluation Exchange Dissemination project. The results of the annual survey of ITV and radio usage, ITV utilization history, ITV utilization trends, and staff development utilization are covered, and conferences/workshops and teleconferences are listed. Results of the annual computer survey are shown and compared with those of previous years. Activities aimed at increasing awareness of ITV and radio are summarized. Plans for 1989-90 to improve utilization and reception conclude the report. (MES)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED316197

1988 - 1989

ANNUAL REPORT

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

E.L. Knight

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

IR014189

Office of Instructional Technology
S.C. Department of Education

BEST COPY AVAILABLE

ANNUAL REPORT

1988-89

Clyde H. Green
Director
Office of Instructional Technology

Sidney B. Cooper
Deputy Superintendent
Division of Instruction

Dr. Charlie G. Williams
State Superintendent of Education

South Carolina Department of Education
Columbia, South Carolina

BEST COPY AVAILABLE

Clyde H. Green, Director
Office of Instructional Technology

The information contained in this report reflects the record of our services in helping to meet the educational needs of the public schools of South Carolina. The 1988-89 school year was the 30th year in which instructional television resources were available. A few of the more significant facts of the year include:

- 95 percent of all schools used ITV via either open-circuit, ITFS, or taped programs.
- 83 percent of all students used ITV as a learning resource.
- 52 percent of all teachers utilized ITV.
- 95 percent of all schools (1,052) had some videotape recording equipment for instructional purposes.
- 90 percent of all television sets used for instruction were color sets.
- 97 percent of all schools had some color sets for instructional purposes.
- 18,342 of the 20,513 total TV sets available were used for instructional purposes by 19,753 teachers.
- 21 percent of the 462 staff development programs were new. Total series/program usage was by 5,397 educators.
- 502 educators earned certification-renewal credit utilizing TEACHING SCIENCE IN THE ELEMENTARY SCHOOL: LIFE SCIENCE, TEACHING SCIENCE IN THE ELEMENTARY SCHOOL: PHYSICAL SCIENCE, and SOUTH CAROLINA HISTORY FOR TEACHERS.

A computer survey was taken to report activities for the 1988-89 calendar year with the results as follows.

- 98 percent of all schools had some microcomputers (96 percent of all schools had some microcomputers for instructional purposes).
- 36,599 computers were in schools (for instructional and administrative uses).
- 57 percent of all instructional personnel were judged to be "computer literate."

A major microcomputer activity was a revision of a publication recommending software for Basic Skills Assessment Program (BSAP) math (grades 1-8), language arts (grades 1-8), and science (grades 1-8).

A central microcomputer lab at S.C. Educational Television (S.C. ETV) and "mini-labs" in each of the five utilization field offices continued to serve educators.

It is evident from this report and the survey of utilization provided by teachers and principals that technology continues to make substantial contributions to the educational process in the schools of South Carolina.

TABLE OF CONTENTS

SUMMARY REPORT 1

ANNUAL MANAGEMENT PLAN 1

ADVISORY SYSTEM 6

PUBLICATIONS 6

COMPUTER-ASSISTED INSTRUCTION (CAI) 8

RESOURCE DEVELOPMENT SECTION
- TELEVISION RESOURCES 9
- LOCALLY PRODUCED RESOURCES, 1988-89 9
- LOCALLY EDITED/REPACKAGED SERIES 10
- NEW TELEVISION SERIES 10
- ITV/R SERIES EVALUATION 19
- WORKSHOPS CONDUCTED 19
- TELEVISION STAFF DEVELOPMENT RESOURCES 20
- RADIO STAFF DEVELOPMENT RESOURCES 21

UTILIZATION SECTION
- UTILIZATION SECTION STAFF MEMBERS 22
- MAJOR ACCOMPLISHMENTS OF OBJECTIVES 23
- INSTRUCTIONAL TELEVISION AND RADIO UTILIZATION 28
- INSTRUCTIONAL TELEVISION UTILIZATION HISTORY 30
- UTILIZATION TRENDS IN ITV 41
- STAFF DEVELOPMENT UTILIZATION 45

EDUCATIONAL CONFERENCES/WORKSHOPS 48

TELECONFERENCES 49

STATEWIDE COMPUTER SURVEY RESULTS 50

ITV AND RADIO AWARENESS 54

PLANS FOR 1989-90 TO EXPAND AND IMPROVE UTILIZATION AND RECEPTION
- UTILIZATION 57
- NETWORK EXPANSION AND LOCAL RECEPTION IMPROVEMENTS PROJECTED FOR 1989-90 58
- ITFS LINE FEEDS 59
- COMPUTER SOFTWARE EVALUATION PROJECT 59

OFFICE OF INSTRUCTIONAL TECHNOLOGY
STATE DEPARTMENT OF EDUCATION
CLYDE H. GREEN, DIRECTOR

SUMMARY REPORT
1988-89

The Office of Instructional Technology is responsible for the development, acquisition, scheduling, and utilization of television and radio resources for grades K-12, staff development, and adult education, which are broadcast over the S.C. Educational Television and Radio Networks, and for the administration of computer-assisted instruction in the public schools.

ANNUAL MANAGEMENT PLAN

The staff participated in identifying 65 major objectives for the 13th year of the office's Annual Management Plan. To achieve each of these objectives, a calendar of activities was developed so that each staff member could review progress monthly. Reflected throughout this report is a high degree of achievement of these objectives, which are as follows.

A. PLANNING

1. Conduct a needs assessment and develop a program for 1989-90 of instructional television resources for approval by the State Board of Education.
2. Develop a Management Plan for 1989-90.

B. FISCAL MANAGEMENT

3. Provide for the leasing of the State Board-approved instructional television resources for 1989-90.
4. Prepare the proposed budgets for updating the five-year cycle.

C. PERSONNEL MANAGEMENT

5. Plan for the professional growth and development of office staff through workshops, seminars, staff meetings, and conferences.
6. Evaluate personnel according to State Personnel and State Department of Education (SDE) policy.
7. Identify, screen, recruit, and recommend employment of professional staff members.

D. ADMINISTRATION

(Print)

8. Revise the S.C. Instructional TV & Radio Resources book for 1989-90.

9. Revise for 1989-90 the Curriculum Guide of ITV and audio resources related to meeting required instructional objectives.

10. Develop or acquire and print lesson guides and student activity materials for use with ITV programs.

11. Develop and print quarterly an Instructional Technology newsletter.

12. Revise and print a 1989-90 guide for building coordinators.

13. Develop and print a guide for staff development resources for 1989-90.

14. Print for distribution a guide to the advisory listings of BSAP software correlations for language arts, math, and science.

15. Develop and print a catalog of PBS Video programs.

(Resource Development)

16. To research, script and begin production on the following new series: Third grade social studies, Black history studies for grade 8, comprehensive health education programs, and fire safety. To research, script and begin production of the following new programs: "Student Winners" series pilot, "Flag Day/War of 1812" for U. S. History series, and elementary holiday programs.

17. Continue the development or revision of the following instructional television resources: BSAP MATH ITV—Grade 3, BSAP MATH ITV—Grade 6, and HOLIDAY SPECIALS.

18. Assist other offices of the State Department of Education and other agencies in achieving their program goals by developing and scheduling programs for broadcast over S.C. ETV.

19. Continue the production and scheduling of the monthly program, UPDATE: DEPARTMENT REPORT.

20. Prepare a correlation of all ITV lessons to the BSAP science objectives.

21. Revise OLD WORLD BACKGROUND, U. S. HISTORY, HUMANITIES, LIFE SCIENCE, and BIOLOGY AND ECOLOGY series with more current resources for 1989-90.

(Scheduling)

22. Assure that television programs are available for broadcast at scheduled times.

23. Schedule S.C. ETV for delivery of the State Board-approved instructional television resources for 1989-90.

24. Schedule S.C. ETV/ER for delivery of the staff development programs for 1989-90.

(Utilization)

25. Implement a program of activities which will increase ITV usage in the public schools by accomplishing the following: (a) gain in new using schools—10; (b) gain in individual student count—10,000; (c) gain in series enrollment—50,000.

26. Continue a program of activities which will provide assistance for access to audio instruction via broadcast or tape.

27. Provide a minimum of 100 school in-service presentations for the purpose of improving quality and quantity of resource usage.

28. Provide instruction for the instructional technology building coordinators through district/regional workshops and individualized instruction to facilitate use of local and state resources by schools.

29. Provide instruction for videotape equipment operators in schools.

30. Increase and improve ITV reception in public schools through a plan of cooperative activities with S.C. ETV and the Office of School Planning and Building, State Department of Education.

31. Provide undergraduate and graduate classes at institutions of higher education with information to effect an understanding and use of ITV and radio resources in South Carolina.

32. Promote the utilization of the ITV series: WHERE ARE WE?, S. C. GEOGRAPHY, GLOBAL GEOGRAPHY, BSAP MATH ITV—Grades 3, 6, and 8, HEALTH EDUCATION SERIES, SLIM GOODBODY, HIGH FEATHER, DEGRASSI JUNIOR HIGH, and UNDER- STANDING TAXES.

(Staff Development)

33. Develop and print the 1988-89 staff development monthly schedules.

34. Offer a program of SDE recertification and graduate-level courses.

35. Continue the identification, production, and promotion of ITV/radio staff development programs.

(Parent Education)

36. Schedule and promote television and radio parent-oriented educational programs.

E. COMPUTERS

37. Revise advisory listing of BSAP-correlated software for reading, composition, math, and science for grades 1-8.

38. Obtain and house in the microcomputer lab at S.C. ETV and the five field offices preview materials pertaining to microcomputers and their use in teaching grades K-12.

39. Operate and maintain a microcomputer lab at S.C. ETV and a regional lab at each of the five Instructional Technology field offices.

40. Provide information, assistance, and workshops on the use of computers in teaching math, reading, composition, and science.

41. Review and recommend approval of applications for computer education courses for educators and monitor-approved courses.

42. Conduct the annual microcomputer survey of schools.

43. Develop and disseminate microcomputer reports.

44. Develop and disseminate programs and print materials related to the office's mission of promoting instructional use of computers as appropriate.

45. Continue an in-service program for staff in the use of microcomputers for instruction.

46. Continue the Software Evaluation Exchange Dissemination Project.

F. EVALUATION

47. Conduct an assessment of utilization based on the BEDS and ITV/Radio Utilization Survey.

48. Obtain and assess student evaluation of ITV resources that are (a) proposed for acquisition; (b) under development; (c) currently scheduled.

49. Obtain and assess teacher evaluation of ITV resources that are (a) proposed for acquisition; (b) under development; (c) currently scheduled.

G. DISSEMINATION

50. Disseminate the 1988-89 television and radio resources book.

51. Disseminate an audio teacher's guide.

52. Disseminate a curriculum guide for the use of 1988-89 ITV and radio resources that correlates to required instructional objectives.

53. Disseminate a quarterly "Office of Instructional Technology Newsletter" to public school personnel.

54. Disseminate a 1988-89 guide for building coordinators.

55. Disseminate lesson guides and student activity materials.

56. Disseminate a monthly staff development schedule to all schools.

57. Implement activities related to informational, promotional, and other instructional technology awareness thrusts of the office.

58. Develop and disseminate utilization reports.

59. Disseminate the 1988-89 Annual Report of the Office of Instructional Technology.

60. Disseminate the 1988-89 advisory listing of BSAP software correlations for language arts, math, and science

61. Disseminate a 1988-89 PBS Video catalog to participating schools.

62. Disseminate a 1988-89 Staff Development Resources Guide.

H. REPORTING

63. Prepare a progress report on the activities of the office for inclusion in the Annual Report of the State Superintendent of Education.

64. Prepare the 1988-89 Annual Report for the Office of Instructional Technology.

65. Develop an equipment inventory and a utilization report.

ADVISORY SYSTEM

In order to provide better lines of communication between the Office of Instructional Technology and those we serve in the schools, an advisory system is employed. This system has four components—12 curriculum committees for various curriculum areas, a principals' committee, an ITV building coordinators' committee, and a large state advisory committee that is representative of the first three components and includes others from the school community and the State Department of Education.

Appointments of the committee members are based upon their knowledge of the content areas and/or their use of ITV/R programs. The committees review new and existing ITV/R programs and the other services offered by the Office of Instructional Technology. Recommendations from each of the committees are presented to the state advisory committee.

The state advisory committee met twice in 1988-89 to formulate the recommendations for the 1989-90 instructional television schedule of programs.

PUBLICATIONS

The Office of Instructional Technology uses printed materials to communicate information and to provide service to the public schools. The following is a list and description of the publications provided in quantity to the schools or are available upon request. All publications are free of charge to the public schools.

1. S.C. Instructional Television & Radio Resources book: Includes significant information about ITV/radio utilization, series telecasts, schedules, and series descriptions. A copy of this book is mailed to all teachers and administrators in August.

2. Staff Development Resources book: Includes valuable information about ITV/radio staff development and training opportunities for individuals and small or large groups. It includes broadcast schedules and lesson descriptions. A copy of this book is mailed along with the S.C. Instructional Television & Radio Resources book in August.

3. Curriculum Guide—ITV Resources in the Defined Minimum Program: Correlates all ITV resources with the curriculum requirements of the Defined Minimum Program. It is provided to the administrators and curriculum personnel of each district.

4. Instructional Audio Teacher's Guide: Contains all teacher lesson guide material relative to the use of individual radio series.

5. "Office of Instructional Technology Newsletter": A quarterly publication which features special articles about ITV/radio utilization and microcomputers, and is distributed to all teachers and administrators.

6. A Primer for In-School Production: A booklet which provides brief guidelines on the essentials of making low-budget TV productions by faculty and students.

7. Instructional Television Building Coordinator's Guide: Provides a handy checklist of suggested services to assist teachers in the use of instructional television and radio throughout the school year.

8. Teacher and Student Lesson Guides for ITV Series: Each ITV series has a teacher's guide for series utilization. Several series are designed to use student worksheets or other materials, and these are provided either in a master copy or in quantity. During 1988-89, 61,669 teacher lesson guides and 27,569 student guides were provided to schools.

9. Instructional Software BSAP Correlations for Language Arts, Mathematics, and Science, Grades 1-8: Provides information on grades 1-8 language arts, math, and science microcomputer software that has been correlated to the South Carolina BSAP Objectives.

10. Holiday Specials Calendar: Provides a listing and telecast schedule of holiday/Christmas specials broadcast during December of each year.

11. Office of Instructional Technology Staff Development Television Schedule: Distributed monthly, August through May. Contains a listing of broadcast staff development programs and their daily broadcast schedules, with special notes to teachers and ITV building coordinators.

12. Office of Instructional Technology Staff Development Radio Schedule: Distributed monthly, August through May. Contains a listing of staff development programs and their daily broadcast schedules, with special notes to teachers and ITV building coordinators.

13. PBS Video Catalog: Provides information on the programs that are available for use by schools in districts that elect to pay a special access fee.

COMPUTER-ASSISTED INSTRUCTION (CAI)

Primary activities for the year have included revising BSAP-correlated language arts, math, and science computer software advisory listings and conducting the sixth statewide computer survey.

Other computer-related support activities included planning, operating six computer labs, scheduling computer training and informational staff development programs over S.C. ETV and Radio, presentations at state education conferences, and serving as the point of contact for information requests on CAI from both in-state and out-of-state educators and agencies.

Throughout the year, the office was involved in the third year implementation of a multi-state pilot project on software evaluation called SEED (Software Evaluation Exchange Dissemination), sponsored by the Southeastern Educational Improvement Laboratory (SEIL).

The sixth statewide computer survey also shows that:

- the total number of computers in K-12 schools was 36,599.
- 1,089 schools (or 98 percent) in 92 school districts (or 100 percent) had computers.
- the total number of printers in K-12 schools was 11,553.
- 30,784 computers in schools were used for instruction, while 3,341 were used for administration, and 2,579 were used for both.

A microcomputer lab containing a variety of microcomputers, software, and a library of publications and other materials continued to assist educators at S.C. ETV. This lab was used by educators to examine hardware and software, and to do research in the use of microcomputers in instruction. The lab was operated by staff from the Resource Development Section. "Mini-labs" served local educators from each of the five utilization field offices. The number of software programs in the six labs are as follows: Columbia, 986; Rock Hill, 400; Charleston, 451; Spartanburg, 350; Blackville, 402; and Florence, 414.

The total staff conducted 19 workshops; participated in 13 training sessions, conferences, and seminars; and made 4 presentations at meetings and conferences.

The Office of Instructional Technology has two sections, Resource Development and Utilization. A summary of the work of these two sections for the past year follows.

RESOURCE DEVELOPMENT SECTION

Reta Richardson, Chief Supervisor

The Resource Development Section develops and recommends for acquisition television and radio resources. As part of the process, staff members visit classrooms to observe how resources are being used, conduct workshops, and produce in-service programs.

TELEVISION RESOURCES

Five series were deleted from the 1987-88 schedule and 28 were added, thus making available 214 series. These contained 3,758 individual lessons which, on a single telecast basis, represented 1,248.17 hours of instructional television broadcast into South Carolina public schools. Each series aired a number of times during the year. This is the most comprehensive instructional television schedule of any state educational network in the country.

LOCALLY PRODUCED RESOURCES, 1988-89

The Resource Development Section completed production of BSAP MATH ITV—GRADE 3 and BSAP MATH ITV—GRADE 6. A brief description of these resources follows:

BSAP MATH ITV—GRADE 3

This package of 27 televised learning resources focuses on the five most difficult subskills at grade 3 for students who scored below standard on the BSAP mathematics test, according to the State Department of Education's analysis of the Joe Ryan Report. Dr. Ryan's report was based on the Basic Skills Assessment Program during 1981-84. The subskills addressed in this series are (1) establishment of relationships, (2) operations and conversions, (3) subtraction, (4) division, and (5) problem-solving. Twenty-four lessons have been selected from current ITV series. Three additional lessons have been produced to further strengthen student learning in these subskill areas. Arletta Raley, instructional specialist, produced these lessons.

BSAP MATH ITV—GRADE 6

This package of 19 televised learning resources focuses on the five most difficult subskills at grade 6 for students who scored below standard on the BSAP mathematics test, according to the State Department of Education's analysis of the Joe Ryan Report. Dr. Ryan's report was based on the Basic Skills Assessment Program during 1981-84. The subskills addressed in this series are (1) operations and conversions, (2) division, (3) place value, (4) establishment of relationships, and (5) applications. Fifteen lessons have been selected from current ITV series.

Four additional lessons have been produced to further strengthen student learning in these subskill areas. Arletta Raley, instructional specialist, produced these lessons.

HOLIDAY SPECIALS, LIFE SCIENCE, NATURESCENE, PHYSICAL SCIENCE, UNITED STATES HISTORY, and OLD WORLD BACKGROUND were revised.

The following programs were produced for in-school use.

Series	Number Completed
BSAP MATH ITV—Grade 3	3
BSAP MATH ITV—Grade 6	6
COMPREHENSIVE HEALTH STAFF DEVELOPMENT	7
ECON AND ME: TEACHER PROGRAMS	2
HOLIDAY SPECIALS	5
THE SHAPE OF THINGS	1
TEACHING ABOUT SOUTH CAROLINA STAFF DEV.	1
THEY CAME FROM TIBILSI	1
Total	26

LOCALLY EDITED/REPACKAGED SERIES

To accommodate instructional and curriculum needs, some acquired series require editing and/or repackaging before they can be telecast to schools over S.C. ETV. Four new programs in the NATIONAL GEOGRAPHIC SPECIALS were edited into two parts each.

NEW TELEVISION SERIES

Language Arts

FROM THE BROTHERS GRIMM
Grades 4-6
10 lessons 15 minutes

This series includes 10 live-action film adaptations of important folk tales. Each program has a different American historical setting and features authentic interior and exterior locations from the Virginia countryside. The purpose of the series is to stimulate interest and understanding in folk literature and to present the classic folktale to contemporary children and adolescents in an accessible format.

GRAMMAR MECHANIC
Grades 6-8
16 lessons 15 minutes

GRAMMAR MECHANIC conveys that grammar skills are tools people need to make language, whether spoken or written, work for them and that a working knowledge of grammar enables people to put words together in ways to communicate effectively. Attention has been given to the logic upon which the rules of grammar are based and to those procedures which must be followed in order to apply correctly and effectively those rules. The setting is an office in the home of a free-lance writer and features her son, Chris, and Grams, the talking computer.

READING SKILLS
Grades 9-12
16 lessons 30 minutes

The KET/GED READING SKILLS is intended for students who already have the basic skills and need to gain proficiency in the more complex interpretation skills. The first five lessons introduce the skills by using literature and interpretation of visuals. In the next eleven lessons, the same skills are applied to science and social studies subject matter. One free student workbook may be ordered from the Office of Instructional Technology by each school using this series.

VOICES AND VISIONS
Grades 10-12
13 lessons 60 minutes

The major objective of this course is to help students develop a greater enjoyment and understanding of poetry. Each of the 13 lessons concentrates on the work of a poet. The course design and sequence emphasize the relationships of the poets and their work, their influence on each other and on those who followed them, and their place in American literature. The poets are: Robert Frost, Ezra Pound, Langston Hughes, Walt Whitman, Hart Crane, William Carlos Williams, Emily Dickinson, Marianne Moore, T. S. Eliot, Wallace Stevens, Elizabeth Bishop, Robert Lowell, and Sylvia Plath.

Mathematics

VECTORS
Grades 10-12
6 lessons 10 minutes

Designed to aid in the teaching of difficult concepts in mathematics, the series uses three-dimensional animation to follow the antics of two policemen of the future as they discover the fascinating world of vectors. The six 10-minute programs begin by defining vectors. Vectors at right angles to each other are added and the magnitude and direction of the resultant are found using the Pythagorean Theorem

and the tangent ratio from trigonometry. With grids, vectors are described by ordered pairs which reflect their horizontal and vertical components. The programs also explore the process of resolving vectors and using the sine and cosine ratios, to find the ordered pair for any vector. The final two programs apply vector principles in the real world through the concept of FORCE.

Science

FROG DISSECTION EXPLAINED
Grades 7-12
2 lessons 20 minutes

FROG DISSECTION EXPLAINED is based on a standard secondary-level biology curriculum and is designed to explain the "how" and "why" of animal dissection to first-year biology students. The series includes both an external and internal examination of a leopard frog. The programs enable the students to learn proper technique by presenting an actual dissection performed by an experienced instructor. FROG DISSECTION EXPLAINED can be used as a pre-hands on introduction, as a supplement in classes that will perform dissection, or as a substitute where dissection is not practical.

VECTORS
Grades 10-12
6 lessons 10 minutes

Designed to aid in the teaching of difficult concepts in mathematics, the series uses three-dimensional animation to follow the antics of two policemen of the future as they discover the fascinating world of vectors. The six 10-minute lessons begin by defining vectors. Vectors at right angles to each other are added and the magnitude and direction of the resultant are found using the Pythagorean Theorem and the tangent ratio from trigonometry. With grids, vectors are described by ordered pairs which reflect their horizontal and vertical components. The programs also explore the process of resolving vectors and using the sine and cosine ratios, to find the ordered pair for any vector. The final two programs apply vector principles in the real world through the concept of FORCE.

PHOTOSYNTHESIS
Grades 11-12
6 lessons 10 minutes

This series is designed to instruct students in the principles of photosynthesis. Exciting 3-dimensional computer animation shows the dynamic process of photosynthesis at the molecular level. Starting with the historic discoveries of Joseph Priestley, Jan Ingenhousz, and Jean Senebier, the series examines the absorption of light by plants, and follows the energy pathways to the production of carbohydrates and other organic materials. Programs also develop the Calvin cycle, as it functions in carbon 3 and carbon 4 plants, and the remarkable fluid transport system that delivers water and nutrients throughout the plant structure.

ORGANIC CHEMISTRY
Grades 11-12
6 lessons 10 minutes

This series is designed to introduce students to the world of organic chemical compounds. Starting with a look at the properties of carbon, including its structure, bonding arrangements, and the shape of its molecules, the series continues to explore its multiple uses. Included are some of the more common compounds, such as soap, fuels, polyethylene, and other petrochemical products. In addition, the series illustrates the production and function of these substances as well as isomers, alkanes, enzymes and polymers.

ELECTROMAGENTISM
Grades 11-12
6 lessons 10 minutes

This series is designed to instruct students to the world of magnetism. It shows how the historical discovery of the magnetic properties of lodestone led to the scientific understanding of Earth's magnetic field. The six computer-animated programs explore this mysterious force from early experiments to the concepts of electromagnetic induction, the motor principle, generators, and transformers. It also looks at fascinating modern theories about the role of Earth's magnetic field in the extinction of species, and about the ways that animals use it for navigation.

READING RAINBOW SCIENCE
Grades 2-5
14 lessons 30 minutes

Why is the award-winning READING RAINBOW television program involved in a science for teachers? The answer is simple—"because science is everywhere." Today, with the growing concern about how students are prepared in the sciences, the focus is to integrate science curricula to maximize science learning opportunities. The teaching of science should be a true cross-pollination process! That's what READING RAINBOW SCIENCE lessons are all about. The science lessons feature these outstanding books: CHICKENS AREN'T THE ONLY ONES, THE LIFECYCLE OF THE HONEYBEE, SPACE CASE, THE MILK MAKERS, and GERMS MAKE ME SICK! And scientific themes with a medly of segments—location visits, interviews with experts, scientific animations, music, book reviews, dramatizations and lots and lots of science information—invite children to explore science in the world around them.

Social Studies

LANDMARKS OF WESTWARD EXPANSION
Grades 4-6
6 lessons 15 minutes

LANDMARKS OF WESTWARD EXPANSION is a series of six 15-minute programs that trace themes and events significant to the history of America's westward movement. Using a field trip approach, LANDMARKS takes students to the sites where this history was made: Fort Clatsop with Lewis and Clark; Fort Vancouver, headquarters of the Hudson's Bay Trading Company; Cape Perpetua, where Captain James Cook sought the Northwest Passage. Through the help of trained "interpreters" and the actual locations, students will experience the times and events. Hosts Mark Sparks and Jane Ferguson add insight as they explore these landmarks of western history.

AMERICAN SOUTH COMES OF AGE
Grades 9-12
14 lessons 30 minutes

This course is designed to accomplish the following major purposes: (1) to develop an understanding of the political, social, and economic transformation of the American South since World War II; and (2) to develop an understanding of the central role of race relations and their interrelation with the political, social, and economic forces that have made the Southern experience in the last quarter century one of the great transformations in American history. This telecourse is a co-production of S. C. ETV and the University of South Carolina.

HISTORY MATTERS
Grades 11-12
1 lesson 15 minutes

This lesson helps high school students understand the value of learning from the past to make decisions today. Students see a real-life example of people using their knowledge of the past while struggling with a major, present-day financial decision. The lesson is taught through the story of a high school student who is faced with a decision to spend his life's savings on a car or to use the money to help his mother and grandfather modernize the family farm. In the end, he makes his decision based on successes and mistakes from his family's case history. Weighing all information carefully, the boy decides to contribute to the business that has been his family's livelihood. By witnessing the conflict faced by a member of their own peer group, students learn that giving up short-term gains is sometimes necessary to reach long-term goals.

THE WORLD
Grades 11-12
26 lessons 30 minutes

THE WORLD: A TELEVISION HISTORY, developed by S. C. ETV with Goldcrest Films and Network Television Ltd., offers a global and geographical view of the human story. Based on The Times Atlas of World History, the series augments students' understanding of our planet from the dawn of mankind and the spread of agriculture to the great classical civilizations of Greece and Rome. The course also covers the development of Africa, the impact of the great religions, such as Islam and Christianity, the Chinese Empire, the Ottoman and Mongol Empires, the development of the United States and Russia, all the way to the Great Depression, the World Wars, the Cold War and the division of the world into rich and poor nations.

Art and Music

ART-I-FACTS
Grades 3-4
10 lessons 15 minutes

The goals of this series are: to introduce students to the artistry of the world around them, to instill an appreciation for the various art forms and styles, and to develop skills that will enhance the students' creativity, expression and personal fulfillment. Each program is designed to introduce the visual elements and artistic concepts, and offers opportunities for students to observe, analyze, experience, and create art.

ART'S THE THING!
Grades 7-12
30 lessons 5-19 minutes

Beryl Dakers' interviews with artists from the ART'S THE THING! series provide students important insights and information about artists and their work. The intimate and informal conversations with the artists in their studios and on location have been selected from the programs that have been produced since the beginning of the S. C. ETV series in 1983. Ms. Dakers is the executive producer/host of ART'S THE THING! Her interviews selected for this ITV package give teachers and students a rare collection of vignettes of artists who either currently live and work in South Carolina or have had their roots here. Discipline-based ancillary materials balanced in the artistic elements of aesthetic value will be developed and made available to accompany these lessons.

Physical Education, Health and Safety

DEGRASSI JUNIOR HIGH
Grades 7-9
26 lessons 30 minutes

The purpose of this series of half-hour dramas is to help young teenagers feel good about themselves through bright, entertaining, and provocative stories to which they can easily relate. Through viewing the lessons and discussing them, the students can become better prepared to make more informed choices in dealing with the problems and realities of growing up. The themes of the lessons are: self-image, peer pressure, friendship, sexuality, family relationships, lying, alcohol, drugs, smoking, dating, sterotypes, child abuse, maturity, responsibility, death, and leadership.

DRUG ABUSE AND HUMAN PHYSIOLOGY
Grades 7-12
7 lessons 25 minutes

Awareness and accurate, complete information are about our best weapons in the war against substance abuse. These seven films stimulate students to analyze the effects of alcohol and drug use and to make personal decisions based on complete information. Scientific documentation and interviews with former users serve as a springboard for meaningful discussions.

ISSUES OF THE 80'S
Grades 7-12
5 lessons 30 minutes

This recently completed television series presents possible solutions to some of the most pressing problems of the 80's. The topics are: the feminization of poverty, teen pregnancy, single parenting, sex equity and emotional abuse. In a gentle and thoughtful way, the series' purpose is to improve the awareness and well-being of students.

HIGH FEATHER
Grades 4-9
10 lessons 30 minutes

By teaching the value of good nutrition and how to achieve it, HIGH FEATHER attempts to motivate children to eat food that is good for them. The series teaches children that, in order to achieve their goals, they must take care of their bodies and that they are responsible for themselves. The series tries to rid its audience, especially children, of the prejudices and misconceptions surrounding the relationship of nutrition and health.

ALL FIT WITH SLIM GOODBODY
Grades 3-4
15 lessons 15 minutes

ALL FIT is designed for children to help them improve their overall level of physical fitness. It will help children identify and develop skills in such areas as flexibility, strength, cardio-respiratory endurance, coordination, posture, balance, etc. Throughout the series, Slim Goodbody encourages a positive attitude towards self and others. Each program will combine participatory elements, i.e., movement designed for classroom application along with simple physiological information about the mechanical principles involved in movement.

DRUG ABUSE PREVENTION, PHASE I
Grades 5-6
3 lessons 30 minutes

Phase I of DRUG ABUSE PREVENTION will provide video programs for concerned adults, a "critical issues" guide, and a community outreach handbook. These materials will introduce adults to a variety of skills and strategies derived from psychosocial theories of behavior, learning, and motivation designed to help children develop positive, health-promoting attitudes and behaviors before they begin drug use or engage in other health-comprising behaviors.

Vocational and Career Education

AUTO SHOP SAFETY
Grades 7-12
5 lessons 10 minutes

AUTO SHOP SAFETY is a curriculum-based, secondary level safety program. It's designed to introduce first-year students to basic equipment and safe techniques in the auto shop. The series is set in an actual shop and uses real students and a professional educator/master mechanic to highlight key points. AUTO SHOP SAFETY is designed to alert students to the dangerous equipment and procedures used every day by mechanics. A rescue squad sequence helps call attention to the potential severity of injury. Overall, the lessons show students how to survive while learning how to work safety in an automotive repair and maintenance environment.

MULTIMETERS EXPLAINED
Grades 9-12
3 lessons 15 minutes

MULTIMETERS EXPLAINED introduces secondary-level electronics students to one of the most commonly used pieces of electronic test equipment as required by a standard secondary electronics curriculum. The series presents basic terminology and demonstrates how to use and distinguish the difference between analog and digital multimeters. Examples of how to actually perform various tests are shown

in a clear step-by-step sequence. MULTIMETERS EXPLAINED uses close-up photography and precise, detailed descriptions to help the student develop a practical working knowledge of multimeters.

GOODWORK VI
Grades 9-12
10 lessons 5 minutes

This series of ten 5-minute documentaries highlights different kinds of occupations for young people. Each program profiles a person who is a professional, looks at his or her training, tours the person's workplace, and explains the practical skills and training offered by employers and by colleges.

BUSINESS CONCEPTS
Grades 9-12
40 lessons 5 minutes

Designed to help teach fundamental concepts in business, this series looks at five themes: retail selling, contract law, accounting principles, business ownership, and inventory. Each program blends clear visual illustration with practical and humorous voice-overs to explain the different topics.

DEVELOPING YOUR CAREER
Grades 7-12
10 modules 40-45 minutes

DEVELOPING YOUR CAREER: A PROCESS IN SELF MANAGEMENT is aimed primarily at high school sophomores, but it can be a useful resource for younger and older students. The course encourages students to discover their talents and skills, to learn to take responsibility for developing these assets, and to get involved in volunteer work as a means of discovering a career and helping the community. The students are taught planning and decision-making skills, and career techniques.

APPLIED COMMUNICATIONS
Grades 9-12
30 lessons (15 modules) 10 minutes

Each of the 15 modules includes both print and video programs that incorporate applied learning activities for each of the five major occupational clusters in vocational education: agriculture, business and marketing, health occupations, home economics, trade and industry, and technical. Two video programs, each approximately ten minutes long, play a significant and varied role in the instructional plan of each module. In some modules, the first video lesson motivates students by highlighting the importance of effective communication in the workplace. In others, it is more directly instructional and may be used to help teach specific skills or concepts that are difficult to teach by other means. The second video lesson in all modules serves as a review and "springboard" to the occupation-specific application activities.

ITV/R SERIES EVALUATION

The evaluation of ITV/R programs is an essential component of the process employed for the development and use of these programs. The evaluation system has two parts, formative and summative.

FORMATIVE: The staff evaluated nine programs from three new series with students and teachers. Other evaluation techniques included sending scripts and completed ITV programs to administrators and consultants in the State Department of Education and to teachers and college professors for review, and using programs to teach groups of teachers and students. A survey was made of all elementary schools to receive third-grade teachers' input for developing the new South Carolina social studies ITV series. Series under consideration for adoption were evaluated by 11,463 teachers, administrators, and students.

SUMMATIVE: The Instructional Technology curriculum and state advisory committees evaluated 1988-89 resources through committee meetings. There were 594 educators involved in this evaluation. These committees provide guidance as to whether or not our resources are accomplishing the objectives for which they were designed and whether or not they need revision. Other summative evaluation activities were submitting programs in competition and securing evaluations of programs used by other agencies in other states.

WORKSHOPS CONDUCTED

Section staff members conducted 10 workshops and classroom presentations pertaining to series in production or content area, with over 125 teachers in attendance. Planning and production activities for 138 new television and radio programs were coordinated by the department for use in workshops and for telecast over S.C. ETV.

TELEVISION STAFF DEVELOPMENT RESOURCES

During 1988-89, the State Department of Education used television extensively to help achieve its goals and objectives. The chief supervisor of Resource Development and the production specialist coordinated the planning, production, and scheduling of activities for the 21 new staff development television programs and 10 new staff development television series produced for use in workshops and for telecast over S.C. ETV. These programs were:

ITV Staff Development—New Single Programs (21)

"Adopt a Library"
"Ben Franklin on the Constitution"
"Board Leadership"
"BSAP Briefs"
"Coaching for Improvement in Teaching"
"Continuity of Learning" (Ages 4, 5, 6)
"Conversations with Artists—Overview"
"Curriculum Alignment and Quality Control"
"Excerpts of 1989-90 New ITV Series"
"Expectation for the Principal: Evaluating Curriculum"
"Finding Time for Curriculum Management"
"A Reading Approach to Math—Overview"
"S. C. Comprehensive Health Act"
"School Improvement and Staff Development"
"The Superintendent's Role in Effecting..."
"Teaching about South Carolina"
"Using Student Achievement Data"
"Vision and School Culture"
"Weighing in for Life"
"Welcome Back to School"
"Where Are We?...Overview"

ITV Staff Development—New Series (10)

EFFICIENT QUANTITY SCHOOL FOOD PRODUCTION
FYI: STATE EDUCATION ORGANIZATIONS
ISSUES OF THE 80'S
NATIONAL CIVICS LESSONS
NUTRITION IN ACTION
SCHOOL FOOD PRODUCTION RECORDS
STRESS MANAGEMENT: SEXUALITY PROGRAMS
TELECONFERENCES ON THE CONSTITUTION
UPDATE: DEPARTMENT REPORT
UPDATE: MUSIC EDUCATION

Total new single staff development television programs and series: 83

RADIO STAFF DEVELOPMENT RESOURCES

Identified for adoption were 52 radio series totaling 961 programs and 258 hours of instruction. These series were provided on tape to requesting schools. A total of 211 teachers used these audio programs for K-12 instruction.

During 1988-89, the State Department of Education used radio to help achieve its goals and objectives by producing programs for use in workshops and for broadcast over the S.C. Educational Radio Network. These programs were:

Instructional Radio Staff Development—New Programs (16)

"Ben Franklin on the Constitution"
"Board Leadership"
"Challenges: 1987 School Boards Association"
"Coaching for Improvement in Teaching"
"Curriculum Alignment and Quality Control"
"Expectation for the Principal"
"Finding Time for Curriculum Management"
"School Improvement and Staff Development"
"School Improvement: Good News and Bad News"
"Student Discipline"
"Students at Risk, Schools at Risk"
"The Child As Learner: An Ecological Perspective"
"The Superintendent's Role in Effecting..."
"Using Student Achievement Data"
"Vision and School Culture"
"Youth at Risk: S. C.'s Search for Direction"

UTILIZATION SECTION

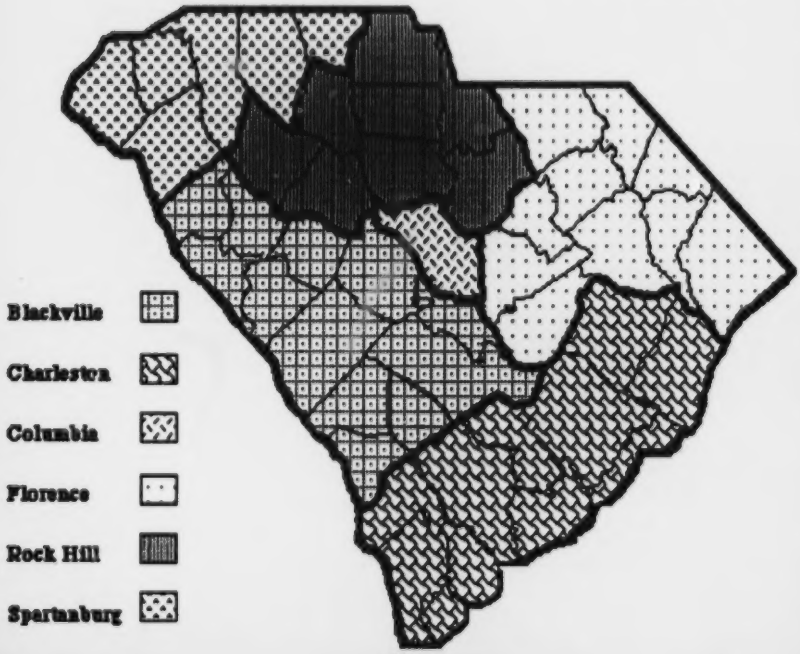
Robert W. Reese, Chief Supervisor

The Utilization Section consists of a chief supervisor, five utilization consultants, and secretarial/clerical staff. The section provides a very active program of services to improve the quality and quantity of utilization and to expand reception. These services, plus the addition of new and revised ITV resources, the services of school building coordinators, and reception improvement, provided by S.C. ETV, resulted in substantial utilization growth.

UTILIZATION SECTION STAFF MEMBERS

The names, office locations, and geographical areas served by the utilization chief supervisor and consultants are:

Chief Supervisor/Utilization Consultants	Field Office
Nicholas V. Martin	Blackville
Judy S. Brasington	Charleston
Robert W. Reese	Columbia
Dorothy L. Owen	Florence
Kathy D. Plumley	Rock Hill
Audey B. Eddy	Spartanburg



MAJOR ACCOMPLISHMENTS OF OBJECTIVES

A total of 159 teacher in-services and 27 building coordinator workshops were provided.

1. In-service and Training

	Accomplished: 1988-89	1987-88	1986-87
Training of VTR Operators	92%	89%	90%
New ITV Bldg. Coord. Orientation	81%	89%	93%
In-services/Workshops			
Schools	107	115	146
College Workshops	21	16	18
District In-Services	8	6	3
Others	23	12	12
Totals	159	149	179

2. Utilization

ITV:			
New Using Schools	+ 3	+ 24	+ 17
Total Series Usage	+ 13%	+ 3%	+ 12%
Individual Students Viewing	+ 2%	+ 3%	+ 6%

3. Summary of Utilization Services Provided

The Utilization Section scheduled consultant services to meet the major service needs of districts and schools. A summary of the major services follow.

	1988-89	1987-88	1986-87
ITV/Radio Building Coordinators			
Appointed	999	1,053	1,017
Trained during fall workshops	610	611	488
Trained by individual school visits	130	60	85
VTR Operators Trained	71	162	87
In-Service Presentations			
Number given	159	149	179
Teachers attending	4,043	4,127	4,992
Schools given in-service	123	108	157

3. Summary of Utilization Services Provided (continued)

	1988-89	1987-88	1986-87
Schools Visited	413	387	404
School and Administrative Office Visits	519	910	942
Superintendents Visited	73	61	58
Conferences with School Administrators	463	281	318
College Classroom Presentations	21	16	18
PTA/PTO Presentations	4	-	-

4. Television Network Expansions

Throughout the school year, S.C. ETV's Division of Field Technical Services maintained ITFS* service and building distribution systems (BDS) and installed outlets. ETV installed 21 BDS during 1988-89.

A. Summary of BDS and additional classroom outlets installed by S.C. ETV:

	1988-89	1987-88	1986-87
• BDS Installed	21	26	20
• Total Outlets Installed:	1,469	1,596	1,440
BDS Outlets	719	1,043	753
Minor Projects	750	553	687
• No. of Locations	222	126	229
B. Total No. of Classroom Outlets as of June 30, 1989	35,817	34,348	36,689

*ITFS: Instructional Television Fixed Service.

4. Television Network Expansions (continued)

	1988-89	1987-88	1986-87
C. Total BDS in schools as of June 30, 1988			
1. ITFS Schools	370	358	380
2. Open-Circuit Schools	556	543	518
Totals	926	901	898
3. School Administrative Offices	40	39	41
4. Taping Centers	14	14	-

5. School Reception Equipment Purchases

The availability of TV and recording equipment for instruction increased by the following amounts and percentages.

	1988-89	1987-88
TV Sets:		
• Net Change in B/W and Color Sets	1,590 (10%)	1,499 (10%)
• Net Change in Color Sets	2,259 (16%)	2,418 (20%)
VTRs	622 (23%)	388 (16%)

6. Computer Education Utilization Activities

Now in its sixth year of providing computer services to schools, the office participated in the fourth year of a seven-state cooperative project for software evaluation, called SEED (Software Evaluation Exchange Dissemination). A statewide survey was completed and four presentations on computer use in instruction were given at educational conferences.

In cooperation with the Office of General Education, the office reviewed computer course applications for approval. Forty-nine courses on introduction to computers and computer applications were funded, serving a total of 532 teachers at an expenditure of $253,600.

6. Computer Education Utilization Activities (continued)

The following chart gives information on these courses for the past five years:

COMPUTER COURSES

Year	Funding	Educators Participating	Classes
1984-85	$ 277,254	1,627	72
1985-86	299,755	1,540	72
1986-87	346,318	1,125	74
1987-88	219,200	1,020	44
1988-89	253,600	1,017	49
	$1,396,127	6,329	311

The staff of the Utilization Section provided a substantial amount of assistance directly to school districts and schools, as given below.

	1988-89
A. School Assistance Visits	
Number of School Visits	125
Number of Schools Visited	96
Total Administrative Visits	68
Total Number of Visits to Schools and Administrative Offices	156
B. Computer Workshops	
Number of Workshops	19
Attendance	254
C. General Presentations on Computer Education	
Number of Presentations	4

7. Computer Software Evaluation Project (SEED)

The Software Evaluation Exchange Dissemination (SEED) project, sponsored by the Southeastern Educational Improvement Laboratory (SEIL) was held in Raleigh, N.C. Participating states included Georgia, Florida, Alabama, South Carolina, and Mississippi. The office staff served on the SEED task force, participated in a "tracer" study of SEED for SEIL, conducted 12 software evaluators' workshops, and administered the project which produced 104 completed evaluations. Other data on the year's evaluations are as follows.

1988-89
South Carolina SEED Software Evaluations

1.	Titles Reviewed		104
2.	Annotations Mailed		188
3.	Number of Workshops		12
4.	Evaluators Trained		
	Attendance	162	
	Trained Individually	6	
	Total Evaluators Trained	168	

One hundred and eighty-eight evaluations from the SEED project were printed and distributed to educators, totaling 582 annotations distributed to date. The project was successful in accomplishing the major objectives of increasing the number and quality of software evaluations available to our educators and increasing the expertise of staff and evaluators in software evaluation.

The chart below gives a SEED Project update for the years 1985-89:

South Carolina SEED Project Update

Year	Number of Workshops	Number of Reviewers Trained	Titles Reviewed	Annotations Mailed
1985-86	1	19	-	-
1986-87	9	110	54	121
1987-88	15	106	90	273
1988-89	12	168	104	188
	37	403	248	582

The following chart gives data on SEED titles listed in the 1989 BSAP Correlation Book:

SEED Software Titles Listed
In 1989 BSAP Correlation Book

	Total Software Titles	Total SEED	1989 Total New Titles	1989 Total New SEED	Titles(SEED) in BSAP Pub.*
Language Arts	181	31	50	4	25
Math	243	47	33	5	24
Science	161	43	36	4	21
	585	121 (20.7%)	119	13	70 (12%)

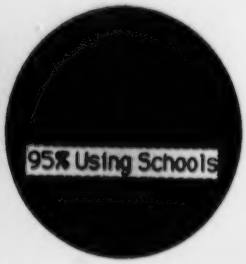
**Titles of software which appeared in BSAP publication one year prior to SEED review.*

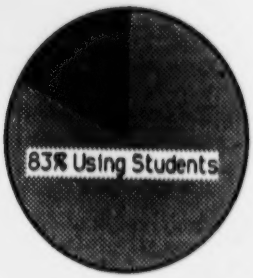
INSTRUCTIONAL TELEVISION AND RADIO UTILIZATION

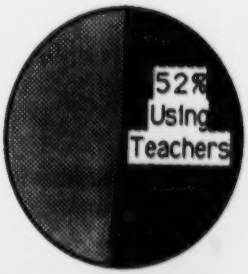
The annual statewide utilization survey of ITV and radio usage and equipment provided data on the usage of ITV/radio resources and growth in local reception. This data is used to manage delivery of consultant services, to schedule resources over S.C. ETV and Radio, to improve local reception, and to place TV and radio sets where they are most needed. This information is given to local districts and schools to assist in budgeting for purchases, equipment maintenance, transfer of unused sets within districts, and retirement of equipment that is not repairable.

INSTRUCTIONAL TELEVISION (ITV)

The state's schools were served by 11 ETV stations, which broadcast ITV programming to grades K-6 on open-circuit, by the closed-circuit/ITFS systems serving grades seven and up and by ETV tape delivery. ITV was used in these ways by:







Television Usage	1988-89	1987-88	1986-87
Schools	1,055	1,052	1,042
Districts	92	92	92
Individual Students Viewing	513,604	506,010	491,356
Total Series Usage	3,333,702	2,949,701	2,870,422
Teachers Using	19,753	18,754	17,806
Classes	154,976	135,903	130,304
TV Sets *	18,342	16,752	15,253
Videotape Machines *	3,392	2,770	2,382
TV Sets			
Total	20,513	18,942	17,488
Used for Instruction	18,342	16,752	15,253
Videotape Machines			
Total	4,871	3,931	3,156
Used for Instruction	3,392	2,770	2,382
Instructional Radio Usage			
Teachers Using	211	-	-

* *Used for instruction.*

INSTRUCTIONAL TELEVISION UTILIZATION HISTORY

SERIES	GRADE LEVEL	SERIES RANK*	STUDENTS USING SERIES			TEACHERS USING SERIES			CLASSES USING ITV		
			88-89	87-88	86-87	88-89	87-88	86-87	88-89	87-88	86-87
LANGUAGE ARTS											
ABOUT BOOKS: INTERMEDIATE	4-6	94	11,654	12,036	11,347	292	319	313	505	584	514
ABOUT BOOKS: PRIMARY	1-3	57	18,231	23,121	19,993	626	875	729	879	1,112	942
BEST OF COVER TO COVER I, THE	4-5	45	24,001	21,147	18,135	742	714	607	1,105	1,021	846
BOOK BIRD, THE	4	85	12,844	14,845	17,038	410	508	566	565	684	743
CURSIVE HANDWRITING A	2-3	27	30,568	27,190	23,783	1,371	1,238	1,072	1,465	1,304	1,166
CURSIVE HANDWRITING B	2-3	90	12,337	11,861	10,098	554	498	457	596	552	486
FINS, FEATHERS AND FUR	1-3	80	14,072	14,521	13,379	644	676	626	684	697	655
FROM THE BROTHERS GRIMM	4-12	4	69,338	-	-	2,098	-	-	3,384	-	-
GATHER ROUND	1-2	6	60,171	55,388	58,476	2,402	2,227	2,217	2,892	2,662	2,791
GETTING THE WORD	6-12	200	2,274	-	-	92	-	-	131	-	-
GRAMMAR MECHANIC	6-8	38	26,545	-	-	470	-	-	1,239	-	-
GRAMMAR SKILLS	9-12	110	9,959	7,993	4,708	175	152	97	500	410	234
HUMANITIES	9-12	54	19,757	20,396	18,992	328	312	315	890	913	859
IN OTHER WORDS	7-8	152	5,825	5,098	3,610	103	85	66	265	227	152
LETTER PEOPLE, THE	1	7	51,934	54,227	51,953	2,112	2,234	2,121	2,514	2,604	2,513
MATTER OF FACT, A	7-10	147	5,917	6,326	8,812	119	128	153	281	320	429
MATTER OF FICTION, A	7-8	75	14,440	12,341	13,367	257	218	250	714	601	653
MORE BOOKS FROM COVER TO COVER	4-6	46	23,967	20,912	-	595	487	-	1,117	989	-
NOVEL, THE	9-12	96	11,249	11,432	12,279	186	192	185	525	539	588
OUR LIVING LANGUAGE	4-6	82	13,009	14,819	14,458	360	426	435	602	681	656
READ ALL ABOUT IT I AND II	4-6	58	18,084	-	-	644	-	-	858	-	-
READALONG 1	1	50	21,020	23,700	25,383	1,017	1,171	1,168	1,075	1,216	1,290
READALONG 2	1-2	93	11,763	12,393	13,104	494	584	584	561	616	667
READING RAINBOW	2-5	1	148,159	119,044	97,687	6,020	4,933	3,877	7,332	5,677	4,690
READING SKILLS	9-12	117	8,954	-	-	195	-	-	493	-	-
READIT	3	112	9,649	10,933	11,975	367	423	462	461	523	554

* SERIES RANK: Based on number of using students.

INSTRUCTIONAL TELEVISION UTILIZATION HISTORY

SERIES	GRADE LEVEL	SERIES RANK*	STUDENTS USING SERIES			TEACHERS USING SERIES			CLASSES USING ITV		
			88-89	87-88	86-87	88-89	87-88	86-87	88-89	87-88	86-87
LANGUAGE ARTS (CONTINUED)											
SHAKESPEARE PLAYS	9-12	31	29,466	-	-	441	-	-	1,302		
SHORT STORY, THE	7-12	11	45,113	43,746	43,068	685	726	694	2,137	2,095	1,997
SHORT STORY SHOWCASE	11-12	8	48,976	47,829	46,093	699	733	680	2,304	2,267	2,128
SHORT STORY SHOWCASE DISCUSSION	11-12	55	19,587	-	-	272	-	-	910	-	-
STORYBOUND	5-6	34	28,086	24,144	23,354	671	620	602	1,313	1,149	1,073
TELETALES	K-3	30	29,627	26,133	24,423	1,168	1,050	950	1,476	1,254	1,186
THINKABOUT	5-6	120	8,523	10,451	10,658	283	366	385	395	510	511
TOMES & TALISMANS	6-8	14	41,083	40,031	40,120	634	665	630	1,834	1,800	1,818
VOCIES & VISIONS	10-12	144	6,144	-	-	112	-	-	286	-	-
WATCH YOUR LANGUAGE	7-10	146	5,995	7,190	4,706	118	135	94	309	367	246
WORDSMITH, THE	5-8	62	16,874	16,753	15,061	403	402	380	821	855	717
WRITE CHANNEL, THE	3-4	79	14,208	14,045	12,771	524	531	508	628	636	579
WRITER'S REALM	4-6	135	6,788	5,315	5,207	164	140	139	310	-	227
WRITING FOR A REASON	11-12	137	6,767	6,738	5,991	134	139	117	329	326	271
YOU CAN WRITE ANYTHING	3-6	102	10,608	9,729	8,238	327	338	281	492	452	374
ZEBRA WINGS	5-8	114	9,287	10,218	8,809	232	243	226	416	462	398
FOREIGN LANGUAGE											
ENSEMBLE	9-12	136	6,775	6,651	8,534	117	117	130	336	317	387
GUTEN TAG	10-11	213	817	1,026	1,082	27	36	17	45	57	43
GUTEN TAG, WIE GEHT'S	10-12	222	379	525	273	15	19	11	24	30	16
ZARABANDA	9-12	131	7,310	5,278	6,866	112	93	106	330	236	287
MATHEMATICS											
BSAP MATH ITV-GRADE 3	3	92	12,136	12,298	-	533	509	-	580	601	-
BSAP MATH ITV-GRADE 6	6	73	14,627	14,640	-	330	328	-	702	724	-
BSAP MATH ITV-GRADE 8	8	81	13,473	15,723	-	246	277	-	686	784	-

* SERIES RANK: Based on number of using students.

SERIES	GRADE LEVEL	SERIES RANK*	STUDENTS USING SERIES 88-89	87-88	86-87	TEACHERS USING SERIES 88-89	87-88	86-87	CLASSES USING ITV 88-89	87-88	86-87
MATHEMATICS (CONTINUED)											
IT FIGURES	4	89	12,553	12,653	11,349	463	455	426	580	610	550
LANDSCAPE OF GEOMETRY	8-10	100	10,830	9,500	8,092	152	152	133	471	441	373
MATH CYCLE	3	115	9,038	11,228	9,970	346	457	444	450	540	538
MATH MATTERS	5-8	99	10,858	1,171	10,598	231	19	226	518	60	519
MATH PATROL II	2	48	22,581	23,234	18,219	999	1,026	838	1,113	1,115	380
MATH PATROL III	3-5	108	10,028	9,347	7,123	413	348	311	491	446	359
MATH SKILLS	9-12	157	5,578	6,124	2,889	127	137	84	282	334	162
MATH WORKS	5	123	7,988	9,521	6,331	214	242	180	402	467	321
MATHEMATICS AT WORK IN SOCIETY	8-12	162	5,251	5,487	5,558	90	90	90	266	256	279
MATHMAKERS II	4-6	156	5,691	-	-	148	-	-	275	-	-
MEASUREMETRIC	4-6	103	10,547	13,633	8,662	250	316	209	506	632	436
METRIC SYSTEM, THE	5-8	61	16,992	2,786	20,443	314	31	371	831	116	943
READING APPROACH TO MATH, A	7-10	160	5,430	6,543	5,409	87	112	97	295	346	288
TWO PLUS YOU (MATH PATROL I)	1	65	16,797	15,944	16,890	771	752	806	830	789	844
SCIENCE											
3-2-1 CONTACT	4-6	9	47,414	44,567	33,288	1,466	1,403	1,062	2,165	1,965	1,433
ABOUT SCIENCE	5-9	68	16,002	13,526	9,856	352	318	208	712	620	437
ALL ABOUT YOU	2-3	12	44,053	54,950	52,187	1,986	2,492	2,354	2,123	2,611	2,480
ANIMALS & SUCH	3-4	52	20,660	22,050	21,570	843	866	823	977	1,017	984
ATOMS & MOLECULES	5-6	53	20,231	17,436	18,333	313	287	291	845	753	763
BIOLOGY & ECOLOGY	10	20	37,701	35,750	33,124	470	460	409	1,621	1,558	1,372
CHEMICAL EQUILIBRIUM	11-12	178	3,972	3,761	3,208	71	63	57	185	163	146
COMMUNITY OF LIVING THINGS, THE	7	86	12,728	11,717	13,014	192	222	219	549	514	552

* SERIES RANK: Based on number of using students.

SERIES	GRADE LEVEL	SERIES RANK*	STUDENTS USING SERIES 88-89	87-88	86-87	TEACHERS USING SERIES 88-89	87-88	86-87	CLASSES USING ITV 88-89	87-88	86-87
SCIENCE (CONTINUED)											
DIMENSIONS IN SCIENCE: CHEMISTRY	11-12	107	10,218	10,402	9,618	151	141	135	447	453	406
DIMENSIONS IN SCIENCE: PHYSICS	11-12	169	5,023	5,525	4,813	98	107	97	238	269	221
DRAGONS, WAGONS & WAX	1-3	15	40,999	45,446	41,661	1,886	2,058	1,908	2,005	2,170	2,278
EARTH SCIENCE	8	39	26,284	26,023	23,543	388	420	370	1,117	1,132	1,018
ELECTRICITY	11-12	168	5,032	5,823	-	93	114	-	216	267	-
ELECTROCHEMISTRY	11-12	197	2,377	1,893	-	39	35	-	105	95	-
ELECTROMAGNETISM	11-12	184	3,377	-	-	57	-	-	149		
ELECTRON ARRANGEMENT & CHEMICAL BONDING	11-12	119	8,536	6,875	6,968	130	108	102	376	295	289
ENERGY FLOW	10-12	170	4,610	4,320	6,525	70	69	57	213	216	154
ENVIRONMENTAL STUDIES	9-12	126	7,732	7,960	4,113	111	117	65	352	351	176
EXXON ENERGY CUBE	7-12	116	9,036	5,973	-	112	77	-	395	257	-
FEATHERBY'S FABLES	1-2	63	16,832	21,173	17,872	789	985	841	828	1,012	872
FROG DISSECTION EXPLAINED	7-12	74	14,500	-	-	200	-	-	605		
HOMEOSTASIS	10-12	179	3,965	4,105	4,732	62	69	70	184	180	207
HUMAN COMMUNITY, THE	6-10	141	6,312	6,040	6,565	106	91	111	293	258	278
INTRODUCING BIOLOGY	10-12	22	36,129	35,793	35,902	454	443	442	1,557	1,523	1,481
LIFE SCIENCE	7	49	22,322	24,452	24,943	310	395	396	946	1,058	1,031
NATIONAL GEOGRAPHIC SPECIALS	5-12	3	86,513	60,922	46,849	1,351	1,005	855	3,912	2,670	2,035
NATURAL SCIENCE SPECIALS	8	70	15,506	13,378	19,099	220	207	234	662	589	773
NATURESCENE	6-10	19	37,960	34,365	21,283	852	789	513	1,773	1,569	990
NUCLEAR PHYSICS	11-12	193	2,632	2,109	-	52	41	-	120	97	-
ORGANIC CHEMISTRY	11-12	176	4,122	-	-	69	-	-	182	-	-
ORGANIC EVOLUTION	11-12	198	2,342	1,713	-	34	33	-	108	79	-
PASS IT ALONG	4-5	218	587	538	576	19	22	16	24	29	29

* SERIES RANK: Based on number of using students.

INSTRUCTIONAL TELEVISION UTILIZATION HISTORY

SERIES	GRADE LEVEL	SERIES RANK*	STUDENTS USING SERIES 88-89	87-88	86-87	TEACHERS USING SERIES 88-89	87-88	86-87	CLASSES USING ITV 88-89	87-88	86-87
SCIENCE (CONTINUED)											
PHOTOSYNTHESIS	11-12	122	8,077	-	-	130	-	-	359	-	-
PHYSICAL SCIENCE	9	71	15,445	17,393	17,575	247	251	259	664	728	719
PROTEIN SYNTHESIS	11-12	140	6,504	5,800	6,036	105	99	85	589	251	249
READING RAINBOW SCIENCE	2-5	10	45,781	-	-	1,841	-	-	2,147	-	-
SEARCH FOR SOLUTIONS	9-12	113	9,396	11,005	10,671	108	119	122	396	447	444
START HERE: ADVENTURES IN SCIENCE	4-7	84	12,860	13,411	12,926	339	350	292	549	555	530
STRUCTURE OF THE ATOM	11-12	83	12,943	8,930	9,901	186	133	158	538	387	425
UNIVERSE & I, THE	8-9	72	15,413	14,145	15,688	190	184	210	658	603	654
UP CLOSE & NATURAL	1-4	16	40,261	43,225	37,922	1,768	1,923	1,649	1,922	2,022	1,771
VECTORS	10-12	206	1,776	-	-	51	-	-	94	-	-
VOYAGE OF THE MIMI	6-8	98	11,096	10,065	14,274	216	247	420	490	442	640
WAVE PARTICLE DUALITY	10-12	185	3,268	2,479	3,477	66	57	68	152	117	162
WHAT ON EARTH?	8	56	18,533	15,950	16,909	255	237	245	797	695	713
WHATABOUT	7-8	88	12,601	10,305	7,053	133	134	83	500	434	280
SOCIAL STUDIES											
ACROSS CULTURES	6-7	87	12,647	11,403	11,397	198	224	214	526	505	476
AMERICA	9-12	69	15,679	14,522	17,418	246	243	243	656	607	707
AMERICA COUNTS	7-12	187	3,204	3,158	3,480	60	58	61	137	133	145
AMERICAN ENTERPRISE	10-12	139	6,512	5,825	8,166	86	83	104	274	237	320
AMERICAN FRONTIER I, THE	6-12	129	7,337	6,466	5,344	157	135	108	321	279	224
AMERICAN FRONTIER II, THE	6-12	165	5,181	4,984	-	100	86	-	222	210	-
AMERICAN LEGACY	5-6	149	5,880	9,178	7,091	153	245	187	251	401	304
AMERICAN SOUTH COMES OF AGE	9-12	173	4,429	-	-	67	-	-	197	-	-
CLYDE FROG SHOW, THE	1	28	30,454	31,648	29,095	1,291	1,427	1,276	1,478	1,545	1,443

* SERIES RANK: Based on number of using students.

SERIES	GRADE LEVEL	SERIES RANK*	STUDENTS USING SERIES 88-89	87-88	86-87	TEACHERS USING SERIES 88-89	87-88	86-87	CLASSES USING ITV 88-89	87-88	86-87
SOCIAL STUDIES (CONTINUED)											
EQUAL JUSTICE UNDER THE LAW	10-12	101	10,631	12,571	9,787	160	177	146	453	515	400
FINDING OUR WAY	4-8	47	23,095	20,345	21,133	495	438	487	978	856	885
GETTIN' TO KNOW ME	4-8	104	10,456	8,739	8,274	337	266	255	544	461	4,633
GIVE & TAKE	8-10	118	8,953	10,136	9,931	139	161	153	392	436	408
GLOBAL GEOGRAPHY	6-9	43	25,207	16,631	-	380	241	-	1,063	678	-
HARRIET'S MAGIC HATS	K-3	24	33,732	36,659	26,964	1,466	1,645	1,235	1,656	1,763	1,326
HISTORY MATTERS	8-12	207	1,700	-	-	25	-	-	74	-	-
IT'S A RAINBOW WORLD	K-1	36	27,887	31,981	31,456	1,132	1,359	1,271	1,343	1,526	1,500
LANDMARKS OF WESTWARD EXPANSION	4-6	183	3,530	-	-	107	-	-	157	-	-
MAKING GOVERNMENT WORK	11-12	59	18,074	17,365	16,663	269	244	254	761	699	872
NEWSCAST FROM THE PAST	9-12	155	5,752	6,694	5,553	85	110	90	238	277	241
OLD WORLD BACKGROUND	7-12	37	27,314	31,883	31,741	388	447	448	1,127	1,284	1,297
OURSTORY	6-12	111	9,777	9,061	13,330	130	116	163	411	376	544
PALMETTO SPECIAL, THE	8	17	40,177	37,824	35,663	623	593	553	1,761	1,609	1,698
PENNYWISE	1-3	105	10,302	12,392	10,374	474	568	490	501	586	499
PORTRAIT OF AMERICA	5-12	132	7,203	6,452	5,281	126	112	98	309	269	236
PSYCHOLOGY 101	11-12	153	5,797	5,674	5,270	110	101	960	242	231	208
SANDLAPPER'S CORNER	3	13	41,273	42,086	42,885	1,691	1,764	1,834	1,947	1,971	2,063
SAUDI ARABIA	9-12	142	6,256	7,440	7,574	76	101	143	260	296	321
SOUTH CAROLINA GEOGRAPHY	6-9	26	31,296	18,636	-	540	368	-	1,453	832	-
SPIRIT OF THE LAND	6-12	208	1,636	1,182	11,660	26	19	30	69	46	67
TRADE-OFFS	4-6	149	5,886	7,193	6,492	159	197	176	267	314	280
TRULY AMERICAN	4-8	23	33,844	35,460	38,694	782	877	875	1,490	1,567	1,688
UNDER THE BLUE UMBRELLA	1	40	26,102	29,211	31,611	1,234	1,421	1,499	1,296	1,456	1,562
UNDER THE YELLOW BALLOON	2-3	51	20,951	25,648	27,572	985	1,184	1,286	1,020	1,230	1,349
UNDERSTANDING OUR WORLD	4-6	64	16,823	15,681	16,978	363	407	444	713	672	728

* SERIES RANK: Based on number of using students.

INSTRUCTIONAL TELEVISION UTILIZATION HISTORY

SERIES	GRADE LEVEL	SERIES RANK*	STUDENTS USING SERIES			TEACHERS USING SERIES			CLASSES USING ITV		
			88-89	87-88	86-87	88-89	87-88	86-87	88-89	87-88	86-87
SOCIAL STUDIES (CONTINUED)											
UNDERSTANDING TAXES	9-12	109	9,968	-	-	166	-	-	485	-	-
UNITED STATES HISTORY	9-12	21	36,909	38,735	43,494	519	520	566	1,564	1,592	1,786
WAYS OF THE LAW	10-12	75	14,366	16,536	12,900	222	255	222	616	709	558
WHAT IS ...?	6-12	171	4,593	4,389	4,078	59	53	57	181	173	162
WHAT'S IN THE NEWS	4-6	5	60,477	52,302	48,536	1,412	1,346	1,275	2,608	2,325	2,111
WHERE ARE WE?	2-4	66	16,642	7,479	-	674	313	-	757	339	-
WORLD, THE	11-12	106	10,288	-	-	149	-	-	426	-	-
ART											
ART-I-FACTS	3-4	134	6,912	-	-	79	-	-	289	-	-
ARTS ALIVE	6-8	177	4,031	3,865	3,216	62	62	48	206	167	141
ARTS-A-BOUND	4-6	204	1,861	2,899	1,929	36	25	33	87	125	89
ARTSCAPE	4-6	95	11,357	9,005	9,782	102	97	103	493	365	422
BIG A, THE	1-3	167	5,054	4,958	-	120	124	-	236	230	-
CONVERSATIONS WITH ARTISTS	7-12	158	5,557	-	-	61	-	-	236	-	-
DRAW ALONG	1-3	32	29,326	31,436	22,390	1,056	1,250	946	1,479	1,477	1,071
IMAGES & THINGS	4-7	190	2,954	4,255	2,963	84	87	93	141	177	144
RETURN OF THE ARTMAKER	5-7	164	5,186	7,148	2,848	55	63	72	219	274	256
VISIONS: ARTISTS AND THE CREATIVE PROCESS	11-12	192	2,728	3,382	2,147	33	46	31	123	140	95
MUSIC											
EXPERIENCES IN MUSIC, DRAMA & DANCE	7-12	143	6,197	6,792	4,893	72	95	74	278	297	216
GUITAR GUITAR	6-12	220	502	467	341	13	12	13	23	23	19
HARMONY	2-3	128	7,629	6,939	5,719	105	128	138	328	302	260
HOLIDAY SPECIALS	K-12	2	86,704	104,572	-	2,592	3,095	-	4,003	4,822	-

* SERIES RANK: Based on number of using students.

INSTRUCTIONAL TELEVISION UTILIZATION HISTORY

SERIES	GRADE LEVEL	SERIES RANK*	STUDENTS USING SERIES			TEACHERS USING SERIES			CLASSES USING ITV		
			88-89	87-88	86-87	88-89	87-88	86-87	88-89	87-88	86-87
MUSIC(CONTINUED)											
IT'S MAINLY MUSIC	4-6	121	8,451	5,274	3,080	76	53	37	366	215	131
MEET AN ORCHESTRA MUSICIAN	4-8	151	5,865	4,591	3,663	50	47	48	260	210	151
MUSIC AND ME	3-4	67	16,324	12,072	7,493	127	136	123	725	518	330
MUSICAL ENCOUNTER	3-6	152	5,807	5,292	3,168	55	44	36	254	211	111
TIME FOR SOUNDS 5	1-5	205	1,803	-	-	8	-	-	79	-	-
PHYSICAL EDUCATION, HEALTH AND SAFETY											
ALL FIT WITH SLIM GOODBODY	3-4	42	25,638	-	-	863	-	-	1,119	-	-
ANTI-SMOKING PROGRAMS	K-12	188	3,131	29,596	-	22	691	-	126	1,330	-
BEFORE THE STORM	7-12	210	1,347	1,069	-	23	19	-	58	55	-
CALLING ALL SAFETY SCOUTS	1-3	78	14,224	15,265	11,955	612	694	512	690	741	577
PHYSICAL EDUCATION, CONRAD	6-9	172	4,504	6,966	7,572	133	182	182	217	317	338
DEGRASSI JUNIOR HIGH	7-9	29	30,073	-	-	532	-	-	1,494	-	-
DRUG ABUSE AND HUMAN PHYSIOLOGY	7-12	60	17,946	-	-	251	-	-	929	-	-
DRUG ABUSE SPECIALS	1-12	18	39,376	-	-	709	-	-	1,738	-	-
FEELING FIT	9-12	148	5,913	6,435	6,114	124	125	101	276	283	243
GROWING UP	5-8	181	3,881	5,982	5,485	74	104	93	186	243	248
HIGH FEATHER	4-9	77	14,366	-	-	417	-	-	691	-	-
INSIDE/OUT	4-7	91	12,294	15,952	15,573	397	572	520	607	761	710
INSIDE STORY WITH SLIM GOODBODY, THE	3-5	41	25,785	33,201	34,141	1,002	1,370	1,339	1,202	1,547	1,562
ISSUES OF THE 80'S	7-12	180	3,898	-	-	76	-	-	177	-	-
LEAPS & BOUNDS	K-2	130	7,333	6,278	5,690	166	146	118	354	286	240
MULLIGAN STEW	4-7	189	3,037	4,381	3,633	98	130	113	161	198	166

* SERIES RANK: Based on number of using students.

SERIES	GRADE LEVEL	SERIES RANK*	STUDENTS USING SERIES 88-89	87-88	86-87	TEACHERS USING SERIES 88-89	87-88	86-87	CLASSES USING ITV 88-89	87-88	86-87
PHYSICAL EDUCATION, HEALTH AND SAFETY(CONTINUED)											
ON THE LEVEL	8-12	97	11,241	10,632	12,250	176	173	180	518	485	525
OUNCE OF PREVENTION, AN	4-6	209	1,633	500	454	34	14	11	78	28	23
POWERHOUSE	5-8	44	24,867	24,082	28,832	638	632	729	1,203	1,186	1,394
RIGHT WAY, THE	9-12	127	7,649	8,256	10,439	120	128	137	472	483	529
SCHOOL BUS SAFETY	K-12	34	28,042	29,993	27,131	1,015	1,131	989	1,312	1,389	1,249
SELF INCORPORATED	5-8	125	7,746	11,165	13,188	171	238	281	377	532	615
SOUP TO NUTS	7-8	138	6,668	6,472	5,518	89	94	94	339	319	263
WELL, WELL, WELL WITH SLIM GOODBODY	1-3	33	28,369	31,814	21,485	1,215	1,405	969	1,402	1,528	1,034
VOCATIONAL AND CAREER EDUCATION											
AND SEW ON	7-12	174	4,372	5,215	-	110	127	-	252	268	-
AUTO SHOP SAFETY	7-12	202	2,092	-	-	52	-	-	144	-	-
BREAD & BUTTERFLIES	4-7	166	5,121	5,366	6,530	130	170	140	248	293	308
BUSINESS CONCEPTS	9-12	194	2,621	-	-	51	-	-	126	-	-
CAREER PLANNING	9-12	124	7,809	6,015	-	151	156	-	381	342	-
DEVELOPING YOUR CAREER	7-12	175	4,267	-	-	73	-	-	211	-	-
DIMENSIONS OF CHILD DEVELOPMENT	11-12	191	2,842	3,754	-	68	94	-	131	179	-
FOOTSTEPS	11-12	161	5,266	5,665	-	114	122	-	247	266	-
GOOD WORK VI	9-12	211	1,230	-	-	21	-	-	55	-	-
KEYS TO THE OFFICE	9-12	195	2,543	2,909	-	56	74	-	131	162	-
MAKING IT WORK	9-12	133	6,946	7,997	-	143	168	-	405	438	-
MULTIMETERS EXPLAINED	9-12	216	671	-	-	22	-	-	46	-	-
PICKING YOUR PATH	3-6	201	2,114	1,894	-	31	46	-	109	86	-
PRINCIPLES OF TECHNOLOGY	10-12	212	1,061	1,006	404	27	21	12	55	64	31

* SERIES RANK: Based on number of using students.

INSTRUCTIONAL TELEVISION UTILIZATION HISTORY

SERIES	GRADE LEVEL	SERIES RANK*	STUDENTS USING SERIES 88-89	87-88	86-87	TEACHERS USING SERIES 88-89	87-88	86-87	CLASSES USING ITV 88-89	87-88	86-87
VOCATIONAL AND CAREER EDUCATION(CONTINUED)											
SPACES	5-8	217	607	693	1,021	9	11	15	26	42	42
WORKSHOP HINTS	8-12	199	2,276	2,399	1,916	42	54	35	132	154	113
WORLD OF WORK	9-12	196	2,476	4,209	-	54	85	-	146	244	-
COMPUTER-ASSISTED INSTRUCTION											
COMPUTER ROOM, THE	4-7	186	3,258	3,931	2,833	48	51	46	157	185	124
COMPUTERBREAK	4-8	159	5,521	5,876	4,294	89	92	98	291	270	247
NIBBLES	6-12	203	2,079	2,514	745	39	35	14	105	123	37
SOLUTIONS UNLIMITED	6-8	221	414	483	358	9	7	6	33	25	16
PBS VIDEO CATALOG PROGRAMS											
PBS VIDEO CATALOG PROGRAMS	6-12	25	32,863	39,011	-	378	483	-	1,485	1,694	-
K-12 STUDENTS VIEWING STAFF DEVELOPMENT											
ABOUT INCOME/OUTCOMES	K-12	239	11	-	-	1	-	-			
BSAP BRIEFS	K-12	238	15	-	-	1	-	-	2	-	-
CHOOSING A COLLEGE	K-12	233	34	194	-	1	8	-	2	8	-
CIPHER IN THE SNOW	K-12	215	701	263	-	10	4	-	30	9	-
COMPETITIVE EDGE, THE	K-12	236	25	35	-	2	1	-	4	1	-
COPYRIGHT ISSUES	K-12	230	48	-	-	1	-	-	2	-	-
EFFICIENT QUANTITY SCHOOL FOOD PROD.	K-12	223	146	-	-	2	-	-	8	-	-
FOOD SERVICES	K-12	229	54	-	-	1	-	-	3	-	-

* SERIES RANK: Based on number of using students.

INSTRUCTIONAL TELEVISION UTILIZATION HISTORY

SERIES	GRADE LEVEL	SERIES RANK*	STUDENTS USING SERIES			TEACHERS USING SERIES			CLASSES USING ITV		
			88-89	87-88	86-87	88-89	87-88	86-87	88-89	87-88	86-87
K-12 STUDENTS VIEWING											
STAFF DEVELOPMENT											
GAMES PROGRAM IN PHYSICAL EDUCATION	K-12	226	135	-	-	1	-	-	4	-	-
LIBRARY SKILLS	K-12	163	5,249	4,202	-	41	22	-	231	154	-
MOTIVATING TEACHERS AND STUDENTS	K-12	237	25	158	-	1	3	-	2	6	-
MOVIN' RIGHT ALONG	K-12	219	529	285	-	8	5	-	21	11	-
ON AND ABOUT MICROCOMPUTERS	K-12	227	78	-	-	2	-	-	5	-	-
RAINBOW'S END	K-12	224	146	14	-	1	1	-	7	2	-
SECOND CHANCE: WIL LOU GRAY SCHOOL	K-12	234	34	-	-	1	-	-	2	-	-
SIGHT AND SOUND OF VIDEOTAPE PRODUCTION	K-12	232	37	-	-	3	-	-	3	-	-
S.C. CHILDREN'S & YOUNG ADULTS' BOOK AWARDS	K-12	182	3,828	684	-	39	7	-	211	28	-
S.C. HISTORY FOR TEACHERS	K-12	225	142	-	-	1	-	-	5	-	-
STEVE GLENN SPEAKS TO PARENTS	K-12	228	60	-	-	1	-	-	3	-	-
TIPS FOR TEACHING THE YOUNG AND RESTLESS	K-12	235	34	-	-	1	-	-	2	-	-
UPDATE: MUSIC EDUCATION	K-12	231	40	-	-	12	-	-	33	-	-
USA/USSR TELECONFERENCE	K-12	214	757	3,760	-	12	47	-	33	174	-
WORLD'S LARGEST CONCERT, THE		145	6,090	6,269	-	21	90	-	275	260	-

* SERIES RANK: Based on number of using students.

UTILIZATION TRENDS IN ITV

UTILIZATION

Utilization Growth

Utilization grew in 1988-89 due to a combination of key factors. These included the addition of 28 new series, the installation of 21 new building distribution systems, the purchase of new videotape machines, and the support supplied to teachers by building coordinators and utilization consultants. Utilization growth should continue in 1989-90 as the ITV series inventory is updated, as the second phase of ITFS expansion is started, and as reception improvements continue to be made by S.C. ETV. The subject area having the highest series usage was language arts with 29 percent of the total, followed by science with 24 percent.

RECEPTION

Information on television equipment located in schools and used directly with students for instructional purposes was collected from the ITV and equipment inventory component of the utilization survey.

Instructional Use of TV Sets

A total of 18,342 television sets were reported used by students in classrooms or libraries for viewing ITV resources.

TV Sets

Ninety percent of all TV sets used for instruction were color, and 97 percent of the schools had some color sets for instructional purposes. A total of 19,753 teachers had use of 18,342 sets for instruction, 1,411 fewer TV sets than teachers.

Quantity of TV Sets

	For Instructional Use		Total	
	1988-89	1987-88	1988-89	1987-88
Number of TV Sets	18,342	16,752	20,513	18,942
Amount of Change	+1,590	+1,499	+1,571	+1,454
Percent of Change	9.49	9.82	8.29	8.31
Number of Schools	1,078	1,068	1,078	1,087
Percent of Schools	97.29	96.56	97.29	98.28
Number of Schools w/Color TVs	1,071	1,065	1.078	1,084
Percent of Schools	96.66	96.29	97.29	98.01
Number of Districts w/TVs	92	92	92	92

Color Status of Total TV Sets

	Number		Percent	
	1988-89	1987-88	1988-89	1987-88
Black/white	2,566	3,313	12.50	17.49
Color	17,947	15,629	87.50	82.51
Totals	20,513	18,942	100.00	100.00

Color Status of Instructionally Used TV Sets

	Number		Percent	
	1988-89	1987-88	1988-89	1987-88
Black/white	1,807	2,476	10.00	14.78
Color	16,535	14,276	90.00	85.22
Totals	18,342	16,752	100.00	100.00

VTRs

School districts, individual schools, and PTA/PTO units continued to provide VTRs to improve local scheduling of ITV programs. A net total of 622 instructionally-used VTRs were added either with local or state money, a 22 percent increase in VTR availability over the previous year. There were a total of 3,392 VTRs/VCRs in our schools which were used for taping/playback of ITV programs.

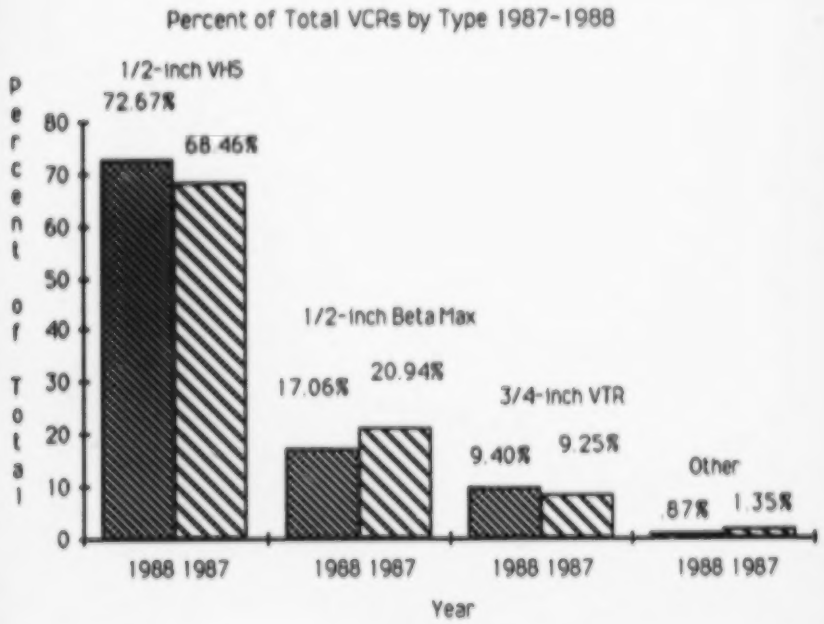
Quantity of VTRs

	For Instructional Use		Total	
	1988-89	1987-88	1988-89	1987-88
Number of VTRs	3,392	2,770	4,871	3,931
Amount of Change	+622	+388	+940	+775
Percent of Change	22.45	16.28	23.91	24.56
Number of Schools	1,052	1,023	1,062	1,075
Percent of Schools	94.94	92.49	95.85	98.10
Number of Districts w/VTRs	92	92	92	92

Type of VTRs

	Number		Percent	
	1988-89	1987-88	1988-89	1987-87
3/4-inch cassette VTR	488	364	9.40	9.25
1/2-inch cassette Beta-Max	885	824	17.06	20.94
1/2-inch cassette VHS	3,770	2,694	72.67	68.46
Other	45	53	.87	1.35
	4,871*	3,931*	100.00	100.00

The most common VCR in our schools is VHS videocassette machines, which now represent 73 percent of all VCRs, up from 68 percent last year. Beta-Max and 3/4-inch VCRs now comprise 17 and 9 percent respectively of all VCRs in schools. (See chart below.)



* Figures exceed the total of 4,871 VCRs for 1988-89 and 3,931 VCRs for 1987-88 due to reporting errors.

ETV Reception Equipment Funds

These funds became available through S.C. ETV for the third straight year, and were matched with television equipment purchases by the schools. The ETV-funded equipment replaced aging black-and-white TV sets and improved accessibility to ITV programming.

Summary of TV Equipment Placed By S.C. ETV

TV Sets	
25"	312
19"	386
	698
TV Stands	78
VCRs	54

STAFF DEVELOPMENT UTILIZATION

A complete listing of program descriptions and broadcast schedules was included in the annual S.C. Instructional Television and Radio Resources book.

A diversified program of staff development offerings was broadcast daily over S.C. ETV open- and closed-circuit networks from 3:00-4:00 p.m., and over the S.C. Educational Radio Network from 3:00-4:00 p.m. for use as resources for district certificate-renewal point plans and professional development on a non-credit basis. This program consisted of 54 ITV and radio series and 182 single-program specials, comprising a total of 462 TV and radio programs. Programs were available to teachers, school administrators, district curriculum staff, teacher aides, school food service personnel, school librarians/media specialists, counselors, parents, and building custodial workers in 37 major areas.

	Educators Receiving Certificate-Renewal Credit		
	1988-89	1987-88	1986-87
Credit Courses			
Science in the Elementary School: Life Science	.	19	6
Science in the Elementary School: Physical Science	27	.	.
South Carolina History for Teachers	475	384	.
	502	403	6
Staff Development Resources Used by Teachers			
Total Series and Program Usage:			
ITV	4,494	4,722	5,071
Radio	903	775	915
	5,397	5,497	5,986
Individual Teachers Using Staff Development:			
ITV	2,472	921	629
Radio	300	56	139
	2,772	977	768

	1988-89	1987-88	1986-87
ITV			
ADULT EDUCATION VIDEO NEWSLETTER	10	11	-
ALL THE DIFFERENCE	43	275	296
ART OF STORYTELLING, THE	98	119	-
BSAP BRIEFS	508	-	-
CIPHER IN THE SNOW	354	206	-
CLASSROOM MANAGEMENT IN P.E.	26	64	-
COACHING FOR IMPROVED TEACHING	24	223	-
COMPUTERS ACROSS THE CURRICULUM	69	43	-
COPYRIGHT ISSUES	495	537	1,037
DANCE PROGRAM IN P.E.	19	-	-
DR. M. HUNTER: TOM CHAPPELEAR LECTURE	133	457	-
DROPOUT PREVENTION WORKS	30	-	-
EARLY CHILDHOOD EDUCATION	41	28	-
EDUCATION OF THE HANDICAPPED	16	15	-
EIA SCHOOL IMPROVEMENT COUNCILS	171	273	264
EVALUATION--BSAP MATHEMATICS ACHIEVEMENT	94	116	491
EVALUATION--BSAP READING ACHIEVEMENT	81	87	283
FOOD SERVICES	70	-	-
FYI: STATE EDUCATION ORGANIZATIONS	11	-	-
GAMES PROGRAMS IN P.E., THE	16	18	-
GUIDANCE	17	-	-
LIBRARY SKILLS	185	240	-
MOTIVATING TEACHERS AND STUDENTS	205	151	191
ON AND ABOUT MICROCOMPUTERS	60	24	-
OPEN DOOR (SECONDARY MEDIA SERVICES)	17	-	-
PATHWAYS	73	-	-
ROLE OF THE ITV BUILDING COORDINATOR	68	-	-
SCHEDULING TV SETS IN THE CLASSROOM	32	-	-
SCHOOL BUS SAFETY	123	259	-
SERIES UTILIZATION	13	-	-
S.C. CHILDREN'S & YOUNG ADULTS' BOOK AWARDS	244	259	-
S.C. COMPREHENSIVE HEALTH ACT	154	-	-
STRESS MANAGEMENT FOR ADMINISTRATORS	21	-	-
TEACHING ABOUT SOUTH CAROLINA	59	-	-
TELECONFERENCES ON THE CONSTITUTION	14	-	-
TIPS FOR TEACHING THE YOUNG AND RESTLESS	21	-	-

Utilization of Selected Series and Programs (continued)

	1988-89	1987-88	1986-87
ITV			
UPDATE: MUSIC EDUCATION	33	23	-
USA/USSR TELECONFERENCE	60	-	-
VCR OPERATOR TRAINING	33	-	-
WELCOME BACK TO SCHOOL	405	404	328
WINGS FOR EVERYONE: INTRO. TO TEACHING	59	-	-
Radio			
AN INVITATION TO LEARN/SUCCEED	107	70	145
BENJAMIN FRANKLIN ON THE CONSTITUTION	18	-	-
CHALLENGES: 1987 ANNUAL CONVENTION	17	-	-
CHILD AS LEARNER: ECOLOGICAL PERSPECTIVE	38	-	-
EFFECTIVE SCHOOLS RESEARCH & PRACTICE	45	43	-
FINDING TIME FOR CURRICULUM MANAGEMENT	17	-	-
GIVE A CHILD A BOOK	82	-	-
GO AHEAD AND TEACH, YOU DON'T BOTHER ME NONE	77	83	89
HANDLING STRESS	42	25	-
INVITATIONAL INSTRUCTION AND LEARNING	17	-	-
MOTIVATING TEACHERS AND STUDENTS	111	67	-
ON CIRCUIT-RIDERS, BRUSH ARBORS...	12	-	-
SCHOOL IMPROVEMENT AND STAFF DEVELOPMENT	26	-	-
SCHOOL IMPROVEMENT: GOOD NEWS AND BAD NEWS	16	-	-
STEVE GLENN SPEAKS TO PARENTS	43	33	-
STRENGTHENING THE FAMILY	39	25	-
STUDENT DISCIPLINE	62	-	-
STUDENTS AT RISK, SCHOOLS AT RISK	58	-	-
UPDATE: ADULT EDUCATION	15	11	-
VISION AND SCHOOL CULTURE	12	-	-
YOUTH AT RISK: SOUTH CAROLINA'S SEARCH	29	-	-

EDUCATIONAL CONFERENCES/WORKSHOPS

Instructional Television/General	Presentation	Display
• Adult Education Conference, Columbia		
• AECT, Hilton Head		1
• National ITV Utilization Conference, Little Rock	1	1
• 14th Annual ITV District Distribution Centers Conference, Columbia	1	
• SCASL Conference, Hilton Head		
• School Board Conference, Myrtle Beach		
• Superintendents' Conference, Myrtle Beach		
• Leadership Academy Workshop, Orangeburg		
• Old English Consortium, Winthrop College, Rock Hill	1	
• Superintendents' Summer Conference, Myrtle Beach		
• "First View"—SECA Conference, Rochester		
• SECA Fall Conference, Louisville		
• SERC Council Meeting, Orlando		
• SERC Planning Meeting, Atlanta		
• SERC Producers Meeting, Lexington		
	3	2
Computers		
• Third National Education Technology Conference, Charlotte		
• Computer Science Educators' Forum, USC, Columbia	1	
• SCCCE Conference, Columbia		
• Hypercard, Charlotte		
• Georgia Technology Conference, Columbus	1	
• SEED Annotators, Raleigh	1	
• IBM Spanish Series, Columbia		
• Charleston Computer Conference, Charleston		
• NECC, Boston,	1	
• IBM Spanish Series Computer Conference, Atlanta		
• SEED Technology Task Force, Orlando		
	4	0
	7	2

TELECONFERENCES

Teleconferences continue to be recognized by the department as an innovative and economical means of facilitating meetings. Teleconferences held during the year were:

Teleconference	1988-89
Adopt the Library	1
The School Administrator's Guide to Information Power	1
Instructional Technology State Committee	1
New Instructional Technology Resources for 1989-90	1
Nancy Reagan Speaks About Drugs	1
America's Shame, America's Hope	1
Your Ticket to the Future	1
Communications Aids and Devices for the Handicapped	1
The Struggle Continues (Black History Month)	1
Star Schools/SERC Distance Learning	3
Update: Music Education	4
They Came from Tibilsi (US/USSR High School Partnership Exchange)	1
Teltrain II	1
ITV Road Show	1
Cross-talk	1
Total	20

STATEWIDE COMPUTER SURVEY RESULTS

INTRODUCTION

The April 1989 Computer Survey was the sixth statewide assessment of computer use by schools and districts by the State Department of Education. A comparison of data from 1983-1989 is provided where available to give evidence of trends in the acquisition and use of computer technology.

SURVEY DESIGN

The questionnaire inventoried computer equipment and software, and dealt with such issues as instructional and administrative uses of computers. A seven-question school form and a five-question district form was developed and distributed to all South Carolina public school principals and district superintendents. All 1,105 schools and 92* school district offices were sent survey forms.

RESPONSE RATE

For the computer survey, the response rate for school district offices was 92 returned forms, or 100 percent, and for schools, 1,094 forms returned, or 99 percent.

SURVEY RESULTS

Computer Equipment Inventory

1. Instructional and Administrative Use

   Of the 36,599 computers in schools, 86 percent were used for instruction and 9 percent for administration in both secondary and elementary schools.

* *Includes Department of Youth Services*

2. Computer Hardware Availability in Schools

	Instructional Use		Total	
	1988-89	1987-88	1988-89	1987-88
Number of Computers	30,784	25,458	36,599	29,766
Amount of Change	5,326	4,370	6,833	5,725
Percent of Change	20.92	20.72	22.95	23.81
Number of Schools with Computers	1,061	996	1,089	1,074
Percent of Schools	95.75	90.05	98.28	97.10
Number of Districts with Computers	92	92	92	92
Percent of Districts	100	100	100	100

3. Change in Total Computers in Schools by Brand

Brand	1988-89	1987-88
Apple	20,833	17,386
IBM	6,726	4,933
Radio Shack	2,371	2,381
Atari	1,422	984
Computer Curriculum Corporation	1,079	699
Others	4,168	3,383
	36,599	29,766

4. Change in Computers in Schools by Use

	1988-89	1987-88	Percent Change
Total Computers	36,599	29,766	22.95
Instructional	30,784	25,458	20.92
Administration	3,341	2,327	43.57
Both Instr. & Admin.	2,579	1,962	31.44
Printers	11,553	8,966	28.85

5. Ratio of Computers to Students

	1988-89	1987-88	1986-87
Total Computers*			
Grades K-12	1:17	1:21	1.26
Grades K-7	1:20	1:25	1:44
Grades 8-12	1:14	1:17	1:16
Instructionally Used Computers			
Grades K-12	1:21	1:25	1:30
Grades K-7	1:24	1:29	1:48
Grades 8-12	1:17	1:20	1:18
180-Day Student Enrollment			
Grades K-12	633,345	632,044	626,521
Grades K-7	406,453	398,489	390,287
Grades 8-12	226,892	236,555	236,234

6. Instructional and Administrative Uses of School Computers and Printers

		Instr. Use		Admin. Use		Instr. & Admin. Use		Printers	
Sch. Level	Total Comp.	Qty.	% of Total	Qty.	% of Total	Qty.	% of Total	Qty.	% of Total
Elem.	20,086	17,219	85.73	1,741	8.67	1,185	5.90	5,387	46.63
Sec.	16,513	13,565	82.15	1,600	9.69	1,493	8.44	6,166	53.37
Total	36,599	30,784	84.11	3,341	9.12	2,579	7.05	11,553	100.00

* *Total computers includes those used for administration and instruction.*

7. Number of Computers in Schools

	Number of Computers		% of Total Computers		Number of Schs. with Computers		Ratio of Comp. to Schs. with Computers	
	1988	1987	1988	1987	1988	1987	1988	1987
Elementary	20,086	15,889	55	53	793	771	25.0/ School	21.0/ School
Secondary	16,513	13,877	45	47	296	303	55.0/ School	46.0/ School
Total	36,599	29,766			1,089	1,074	33.0/ School	28.0/ School
Percent of Schools with Computers:					98.3	97.1		

8. Frequency of K-12 Schools per Number of Computers

Number of Computers Per School	Number of Schools with Indicated Number of Computers 1988	1987	1986
1	5	101	69
2	4	53	49
3	11	50	62
4	12	42	53
5	15	38	48
6	3	47	51
7	19	40	47
8	21	47	51
9	18	37	49
10	15	35	36
11	39	34	26
12	19	48	39
13	18	33	37
14	24	33	38
15	22	31	30
16	31	27	31
17	30	23	34
18	37	23	28
19	34	25	21
20	25	20	15
21 +	687	287	247
Total Schools	1,089	1,074	1,061
Number of Schools Having 1 to 2 Computers	9	154	118
Number of Schools Having 10 or More Computers	981	619	582

ITV AND RADIO AWARENESS

The office and S.C. ETV collaborated on a special awareness emphasis recognizing the 30th Anniversary of ITV and of ETV for the State.

- Joint ETV/ITV Celebration

  The ETV Network's 30th anniversary celebration ran in September and included emphasis on ETV's beginning with the in-school use of instructional television. ETV's special events included:

  - Anniversary "Kick-Off" at Dreher High School
  - Press kits set to news media
  - Advertising pieces in newspaper
  - Family outing on Lake Murray
  - Exhibit at State Fair
  - Traveling Exhibition at museums, art centers, colleges, and the State Capital
  - Old equipment display at ETV's studio window

- ITV Emphasis Week

  The office, in collaboration and support by S.C. ETV conducted an array of special activities concentrated during National Education Week (Nov. 13-19) but extending beyond this period. These ITV-oriented activities included:

  - Special CROSSTALK program telecast over ETV
  - Production and broadcast of five, 5 1/2-minute (Nov. 14-18) FOCUS segments over ETV featuring education
  - PM Magazine (WIS-TV) featured ITV (Nov. 16)
  - PTA/PTO ITV presentations (November, 4 schools)
  - At least ten newspapers published articles on ITV

- Other activities of an on-going nature included:

  - Newsletters

    - Four issues of the "Instructional Technology" newsletters were published, featuring articles for interest to educators.

  - Update: Department Report

    - These nine, 15-minute, monthly television programs featured ITV Resources, Computer Learning Month, ITV Emphasis Week, Holiday Viewing, ITEC Regional Consultant, Black History Month, the ITEC Annual Surveys, Regional Taping Centers, and Student Art Contest Winners.

- International Visitors

  - Our state's ITV Program and ETV Network system has received substantial recognition nationally and abroad. Consequently, a large number of international visitors, sponsored by the U.S. State Department and other agencies, schedule visits to study first-hand our operations. These visitors were from the following countries:

    - Argentina
    - Botswana
    - Egypt
    - India
    - Jordan
    - Kenya
    - Oman
    - Panama
    - Sudan
    - West Germany
    - Zimbabwe

- <u>Computer Learning Month (CLM) and Instructional Computer Awareness</u>

  - The South Carolina Department of Education very actively participated in CLM for October, 1988. A summary of key activities included:

    - Governor Carroll A. Campbell, Jr. proclaimed October, 1988 as Computer Learning Month with joint sponsorship of the S.C. Department of Education and the South Carolina Council on Computers in Education (SCCCE).

    - The S.C. Department of Education joined other state departments of education in being an official sponsor for CLM.

    - Distributed CLM brochures and posters to each public school in the state.

    - Ran an article on CLM in the Office of Instructional Technology newsletter for September 1988, distributed to each teacher in the state.

    - Ran a spot announcement about CLM over S.C. ETV .

    - Made an announcement about CLM on monthly staff development TV program broadcast statewide for educators over S.C. ETV .

    - Ran an announcement about CLM on the Department of Education's Electronic Mail System to 65 of 92 school district administrative offices.

- South Carolina Council on Computers in Education (SCCCE) membership informed about CLM through their newsletter.
- Press release on CLM distributed to all state daily and weekly newspapers by S.C. ETV's Public Information Department.
- Encouraged CLM contest entry submissions by public schools; team of 15 educators served as national judges for Youth to Adult and for Youth to Youth group contest.
- Richland County School District One computer consultant scheduled a two day computer fair at Richland Mall in Columbia, SC, for children and adult shoppers.
- S.C. Department of Education representative participated in a Computer Science Educator's Forum sponsored by the University of South Carolina and Clemson University on October 22, 1988.
- CLM was celebrated at Caughman Road Elementary School by several activities to include a Computer Fair.
- CLM was observed at McCrorey-Liston Elementary School by having computer workshops for all students.

PLANS FOR 1989-90 TO EXPAND AND IMPROVE UTILIZATION AND RECEPTION

UTILIZATION

In addition to projected in-services and other consultant services, the following activities are planned to improve the quality and quantity of ITV/radio usage.

- Staff Development Programming

  For Teachers: Previews of new ITV resources will be provided during May. Special programs on general utilization techniques and of individual series will be scheduled throughout the year.

  For Building Coordinators: The following special programs, designed for the particular needs of building coordinators, will be scheduled.

  - Role of the Building Coordinator
  - VTR/VCR Scheduling Techniques
  - Scheduling Television Sets
  - ITV Utilization Survey

- District Distribution Center Personnel

  The 15th Annual Spring Conference will be held in May 1990. The conference is held for district distribution center personnel to facilitate curriculum and technical planning.

NETWORK EXPANSION AND LOCAL RECEPTION IMPROVEMENTS PROJECTED FOR 1989-90

ITFS Expansion Phase

The General Assembly approved four million dollars to begin the expansion of the ITFS Network. Projects planned with the new money are expected to be completed September 1991. Seven new ITFS district distribution centers and expansion of the Charleston Center are planned, adding to the 14 currently in existence. Each center is a cooperative effort between school district(s), S.C. ETV, and the State Department of Education. Each ITFS center will receive a four-channel ITFS facility for broadcasting secondary ITV resources to all middle, high, and vocational schools within their coverage areas and a videotape library of ITV and staff development resources for grades 7-12. Continued efforts will be made to secure funding for the remainder of the statewide ITFS Network for schools either not served or without full service.

The projected new ITFS centers in general order of completion are as follows.

- Charleston County (Expansion)
- Anderson County (Districts 1-5)
- Lexington County (Districts 1, 3, 4)
- Chester/Union Counties
- Marlboro County
- Oconee County
- Colleton County
- York County (Districts 1, 2, 4)

Minor Project Installation

S.C. ETV plans to continue the installation of regular and portable classroom outlets on a cooperatively-funded basis with school districts as funds are available.

ITFS Expansion Needs

There are presently 629 schools and school facilities that should be receiving closed-circuit/ITFS system services, 180 of these now receive full ITFS service. Another 160 have only partial ITFS service (receiving only two of the four possible closed-circuit channels) and 289 other schools and school facilities receive no ITFS services.

ITFS LINE FEEDS

The service of providing line, program feeds, or special broadcasts by request of a school or taping center over the ITFS Network has been substantially reduced due to their high costs and excessive wear on machines and master tapes. Line feeds are only available now on an emergency basis for staff development and some special K-12 programs. Line feeds totaled 2,111 in 1988-89 and 1,108 in 1987-88.

The following chart gives monthly data on line feeds for the past three years.

CLOSED CIRCUIT LINE FEEDS

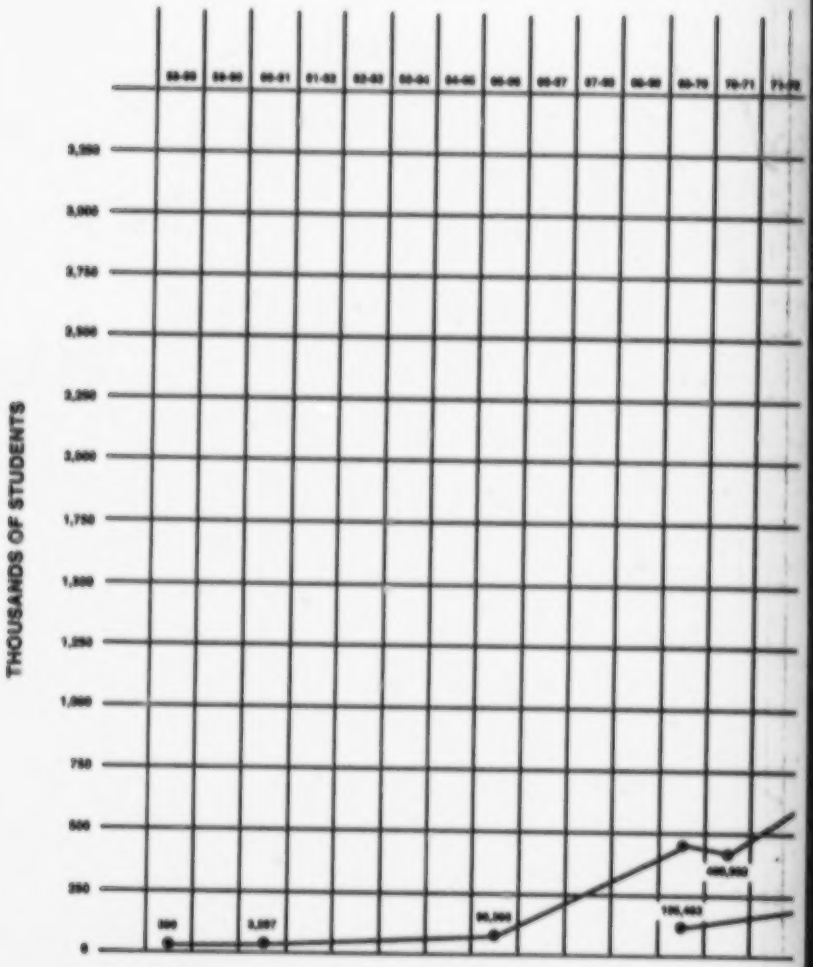
	1986-87	Accom. Totals	1987-88	Accom. Totals	1988-89	Accom. Totals
July	0	0	4	4	4	4
August	51	51	6	10	127	131
September	801	852	29	39	230	361
October	811	1,663	50	89	210	571
November	534	2,197	117	206	360	931
December	280	2,477	183	389	305	1,236
January	777	3,254	135	524	125	1,361
February	140	3,394	171	695	170	1,531
March	38	3,432	122	817	100	1,631
April	30	3,462	111	928	115	1,746
May	20	3,482	155	1,083	365	2,111
June	4	3,486	25	1,108	0	2,111

COMPUTER SOFTWARE EVALUATION PROJECT

The seven member states of the Software Evaluation Exchange Dissemination (SEED) project (New Jersey 1988) are continuing the project for 1989-90. Each state is to complete upwards of 75 evaluations, for which additional evaluators will be trained by our utilization consultants.

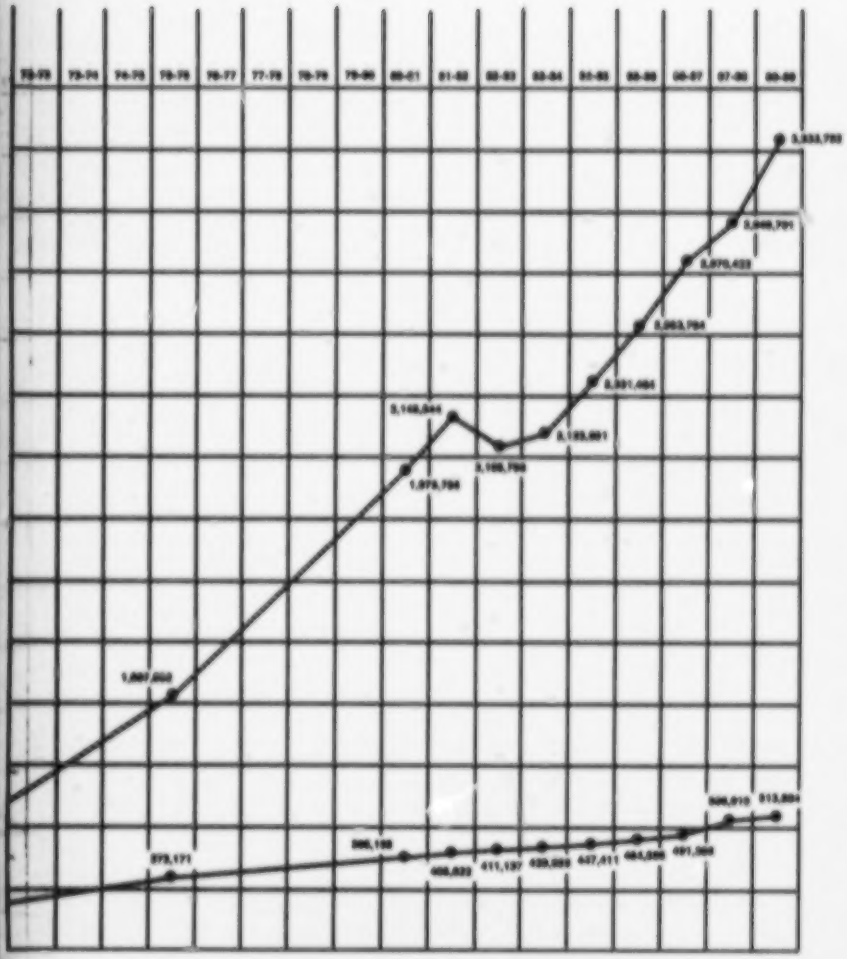
Subject areas of the software titles to be evaluated will primarily include language arts, mathematics, social studies, and science.

This chart shows the total ITV series usage, which counts students for each different series viewed and the number of individual students viewing ITV. Individual students viewing ITV was not officially documented until 1969-70. For further information, contact the S.C. State Department of Education's Office of Instructional Technology, 206 Rutledge Building, Columbia, S.C. 29201.



ITV UTILIZATION-30 YEARS

Total ITV Series Usage
Total Individual Students Viewing



Printed by the S.C. ETV Network